

South African Medical Journal

Suid-Afrikaanse Tydskrif vir Geneeskunde

Vol. 24, No. 13

Cape Town, 1 April 1950

Weekly 2s

'N OORSIG EN BESPREKING VAN 240 HYSTEREKTOMIË

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Dit is 'n natuurlike neiging van die mens om die minder goeie resultate en gevolge van sy werk te wil verberg en vergeet en dit is dus wenslik en gerade om van tyd tot tyd al die werk in oënskou te neem en die resultate eerlik te ontleed. In die jongste tyd is aansienlike publisiteit in sowel die leke as mediese pers, gewy aan die onderwerp van onnodige operasies. Dit het verder daartoe bygedra om ondersoek in te stel na die indikasies vir en resultate van hysterektomies gedoen in die Ginekologiese Departement van die Algemene Hospitaal, Pretoria. Die blote feit dat die bitsige aanklagtes wat ingedien word teen chirurgie alleen in uitsonderlike gevalle waar is, verhoed tog nie ernstige en betreurenswaardige moontlikhede nie. Die neiging mag ontstaan by die publiek om enige besluit tot nodige, en selfs lewensreddende, operasie te beskou met 'n aansienlike mate van twyfel en wantroue en gevolglike vertraging, of selfs weiering, van die operasie. In soverre dit ginekologiese chirurgie aangaan, blyk die oorgrote meerderheid van aanklagte toegespits te wees op die operasie van hysterektomië.

Die huidige studie strek oor 'n periode van sewe jaar, vanaf 1 Januarie 1942 tot 31 Desember 1948, en behels alleen blanke, hospitaal-klas pasiënte. Privaat en nie-blanke pasiënte kon nie ingesluit word nie aangesien hul lêers en verslae onvoldoende informasie bevat het. Graag sou ons langs hierdie weg 'n ernstige versoek rig vir die beter opskryf, klassifikasie en bewaring van gevalle om sodoende te verhoed dat aansienlike materiaal vir studie en navorsings doeleindes nie so onherroeplik verlore sal gaan nie.

Die ginekologiese blanke afdeling in die Algemene Hospitaal bestaan uit 33 beddens waarvan sommige gedurig in beslag gehou word deur privaate pasiënte. Al die hysterektomië in die sewe jaar is deur twee operateurs of self gedoen, of onder hul toesig.

Tabel I: Aantal en Tipe van Hysterektomie

Totale hysterektomie ...	...	...	...	...	131
Sub-totale hysterektomie ...	...	...	...	...	93
Vaginale hysterektomie ...	...	...	...	...	16
Totaal ...	...	...	...	...	240

Tabel II: Groepering Volgens Ouderdomsgroepe

		20-29	30-39	40-49	50-59	60-69	70 en ouer
Totaal ...	...	1	33	50	35	10	2
Sub-totaal ...	...	0	34	43	13	2	0
Vaginaal ...	...	0	0	4	8	3	1
Totaal		1	67	97	57	15	3

Daar sal gemerk word in Tabel II dat die grootste aantal hysterektomië uitgevoer is op pasiënte tussen die ouderdomme van 40 en 49 jaar en dat net een gedoen is onder die ouderdom van dertig. Dit is gedoen op 'n vrou van 29 jaar op wie 'n diagnostiese kurettag, gedoen vir ongereelde en profuse menstruasie, die teenwoordigheid van adenoma malignum aangetoon het.

MORTALITEIT

Daar was vier sterfgevallen in die hele serie van 240 hysterektomië, d.w.s. 'n mortaliteit van 1.66%.

Die eerste het plaasgevind in 1945 in 'n vrou van 41 met endometrieële adeno-karsinoom en wie skielik op die operasie-tafel oorlede is net nadat die uterus totaal verwyder is. Postmortem ondersoek het getoon dat 'n groot pulmonêre embolus die oorsaak van dood was. Die tweede was in 1946 in 'n 59-jarige vrou met myomata en 'n cervikale poliep. Laasgenoemde is eers verwyder en mikroskopiese ondersoek het maligne veranderinge getoon wat 'n totale hysterektomie ge-eis het. Die dood het ingetree op die elfde post-operatiewe dag as gevolg van 'n koronêre tromboses. Die derde sterfte in 1947 was die gevolg van 'n akute dilatasie van die maag na sub-totale hysterektomie in 'n vrou van 37 jaar met multipel myomata. In 1948 het die laaste sterfgeval voorgekom, weer as gevolg van 'n pulmonêre embolus op die vierde post-operatiewe dag na 'n totale hysterektomie op 'n 70-jarige vrou met endometrieële adeno-karsinoom.

Wanneer hierdie vier gevalle geanaliseer word, kom mens tot die gevolgtrekking dat alleen die laaste dood miskien voorkom kon geword het. Vanweë haar

seniliteit en algemene toestand wat aangestip was as minder goed te wees, kon 'n meer konservatiewe tipe van behandeling gevolg geword het, naamlik radium plus diep bestraling.

Tabel III: Groepering in Individuele Jaar-Periodes

	Totaal	Sub-totaal	Vaginaal
1942	18	16	1
1943	11	15	1
1944	11	13	1
1945	15	13	3
1946	19	13	2
1947	25	17	1
1948	32	6	7
	131	93	16

Daar sal gemerk word uit hierdie tabel dat daar 'n definitiewe toename was in die doen van die totale operasie; die sub-totale operasie het oor die algemeen verminder, veral in 1948.

Oor die onderwerp van totale versus sub-totale hysterektomie heers daar al 'n hewige dispuut vir baie jare onder vooraanstaande ginekoloë. Die huidige slotsom van opinie is dat in die meeste gevalle die totale operasie by voorkeur gedoen moet word. Danforth¹ gee twee goeie redes waarom die cervix verwyder moet word. Daar is naamlik cervices wat ongesond is alhoewel hul normaal en benigne mag voorkom, met epitheel aktiwiteit wat nie beskou kan word as normaal te wees nie en ook dikwels teenwoordig is in die afwesigheid van kroniese cervicitis en/of endocervicitis. Sulke cervices kan dan heelwat moeilikheid veroorsaak na sub-totale hysterektomie deurdat daar 'n gedurige leukorrhoea teenwoordig is wat geensins reageer op gewone behandeling nie. Dit word toegeskryf aan 'n verminderde weerstand wat die gevolg van die vermindering van die bloedstoevoer van die cervix is. Sy tweede vername rede is die voorkoms van karsinoom van die cervikale stomp. Alhoewel breedvoerige en teenstrydige diskussies oor hierdie onderwerp nog gereeld verskyn, kom daar meer en meer aansienlike verslae in die literatuur voor wat toon dat die aanwesigheid van karsinoom 'n definitiewe en werklike gevaar is. Von Graf² het reeds in 1932 verslag gedoen van 'n voorkomssyfer van 4.1% van karsinoom in agterblywende cervikale stomp in 'n serie van 4,269 gevalle van cervikale karsinoom; Meigs³ gee 'n voorkomssyfer van 2.13% in 'n serie van 1,218 gevalle in 1936; in 1940 rapporteer Masson⁴ 'n voorkomssyfer van 3.97% in 1,318 gevalle, terwyl McDonough⁵ in 1948 in 'n serie van 257 totale hysterektomieë, vier gevalle van cervikale karsinoom vind, wat ontdek is met roetine biopsie, daar die operasie in al vier gevalle gedoen is vir 'n benigne kondiesie van die uterus. Davis en Cheek⁶ het 'n serie pasiënte met klage van vaginale bloeding na sub-totale hysterektomie, ondersoek en gevind dat kanker van die cervix aanwesig was in cervices waar daar geen suggestiewe tekens of aanwysings teenwoordig was nie. Crawford *et al.*⁷ het 'n voorkomssyfer van 5.7% van kanker in agterblywende cervices in 123 gevalle van sub-totale hysterektomie gevind en hulle beklemtoon ook die feit dat die cervikale stomp 'n vername oorsaak is van baie klage.

Die belangrikste argumente wat aangehaal word teen roetine totale hysterektomie is (a) 'n hoër mortaliteit en

morbiditeit, (b) prolapse van die vagina, (c) groter gevaar van beserings aan blaas en ureters, en (d) 'n verkorte vagina met dyspareunia. Die argument van 'n hoër mortaliteit kan nie gebruik word nie solank dit laer is as die voorkomssyfer van kanker van die cervikale stomp wat vandag algemeen aangeneem word as minstens 2% te wees. Wat betref die drie sterfgevalle wat hier voorkom na totale hysterektomie, moet daar onthou word dat al drie pasiënte korpus karsinoom gehad het wat in elk geval 'n totale operasie genoodsaak het. Indien die een geval waar die dood te wyte was aan 'n koronêre thrombose, uitgeskakel word, vind ons dat daar twee sterfgevalle was in 'n serie van 131 totale hysterektomieë, 'n voorkomssyfer van 1.5%. Dit word dan ook algemeen beweer dat die hoër mortaliteit, so dikwels aangehaal as 'n argument, alleen van toepassing is op die 'toevallige' operateur.

Prolaps van die vagina sal nie plaasvind nie mits die operateur 'n deeglike en grondige kennis dra van die anatomie van die bekken strukture en organe sodat die uterosakrale, infundibulo-pelvisiese, ronde, en die kardinale of Mackenrodt se ligamente deeglik en voldoende vasgeheg kan word aan die hoeke van die vagina. Etlke doeltreffende tegnieke en modifikasies word in die literatuur beskryf en ryklik ge-illustreer. In die huidige serie is daar geen rekord van een post-hysterektomie prolaps van die vagina nie. Buitendien, agterlating van die cervix om 'n sogenaemde voldoende ondersteuning te vorm, is al oor en oor bewys 'n uiters foutiewe argument te wees.

Die groter gevaar van besering van die blaas en ureters is 'n faktor wat altyd onthou moet word. Wanneer die operasie gedoen word deur 'n ervare en voldoende opgeleide ginekoloog behoort sulke beserings nie voor te kom nie, en hulle sal ook nie voorkom nie solank die verskillende beperkende faktore streng nagekom word. In 'n baie vet vrou met 'n diep, onbereikbare bekken, in die teenwoordigheid van uitgebreide vergroeiings in die cul-de-sac en om die blaas soos gebeur in endometriosis, in gevalle waar daar aansienlike verdikking en verkorting is van die parametria met gevolglik 'n fiksering van die cervix, in al sulke gevalle sal dit vanselfsprekend uiters moeilik wees om te wil volhard in pogings om die uterus totaal te wil verwyder. Waar daar onsekerheid bestaan soos byvoorbeeld in die teenwoordigheid van 'n groot cervikale myoom, of met uitgebreide adnexitis, of 'n groot adnexale massa, kan ureter-kateters pre-operatief ingesit word om die ureters beter te lokaliseer. 'n Ander prosedure wat ook hier gevolg word in gevalle waar daar uitgebreide ontstekings-toestande van die adnexae is, is om die uterus te halveer en dan elke helfte met sy adnexae van binne af lateraal te verwyder.

Daar was geen geval in die serie met klage van blywende dyspareunia as gevolg van 'n te kort vagina nie. Waar soiets wel ontstaan is dit alleen van tydelike aard en verdwyn die dyspareunia binne 'n paar weke. Tydens die totale operasie word die vagina teenaan die cervix afgesny, die gebruik van vaginale klemme tot 'n minimum beperk en voldoende en korrekte herstel en ondersteuning van die vagina word toegepas. Dit moet verder ook altyd onthou word dat 'n ongesonde cervix dikwels die oorsaak is van diepge-wortelde dyspareunia.

Die is me hierdi opera wie d doe oorla hyster blywe moet delik Wa totale de c skole Ho word nie d Dit v daar sodat Waar die in aange en ge 'n mo die v van t onver is vo Ke adne: uitge bekke van o gevol cervix waar Nulli en in Cam in nu Di welb deur Die serie W aang meen men: uteri nie, teenv pasië meer wati oude die e hede Bon in 'n dooi te w

Die bewering dat die risiko in die algemeen groter is met die totale operasie word weerlê deur analyse van hierdie serie. Dit is egter weseleklik groter waar die operasie gedoen word deur die 'toevallige' operateur wie dan ook altyd die sub-totale operasie behoort te doen in benigne kondisies van die uterus en die totale oorlaat aan de geoevende ginekoloog. Na sub-totale hysterektomie is periodieke ondersoek van die agterblywende cervikale stomp 'n noodsaaklike vereiste en moet hierdie feit altyd deeglik aan die pasiënt verduidelik word.

Waar hierdie departement dus voorkeur heg aan die totale hysterektomie, is dit in ooreenstemming met de oorgrote meerderheid van ander ginekologiese skole.^{1, 4, 6, 15}

Hoewel vaginale hysterektomie nie veel hier gedoen word nie, alleen maar 16 in die 7 jaar, ly dit geen twyfel nie dat dit 'n uiters doeltreffende en veilige operasie is. Dit word hier toegepas in die ouer tipe pasiënt waar daar ook aansienlike mate van prolaps teenwoordig is, sodat vaginale plastiek terselfdertyd gedoen kan word. Waar die cervix afkom, of afgetrek kan word, tot by die introitus, is vaginale hysterektomie by voorkeur die aangewese operasie. Averett¹⁶ is 'n ywerige voorstander en gee 'n oorsig van 2,427 vaginale hysterektomieë met 'n mortaliteit van 0.24%, tesame met 'n uitensetting van die verskillende voordele. Danforth¹⁷ doen verslag van 600 gevalle met 'n mortaliteit van 0.16%, werklik onverbeterlike resultate, en die Amerikaanse literatuur is vol van soortgelyke verslae.^{18, 24}

Kontra-indikasies gewoonlik aangegee is: uitgebreide adnexitis of tumore van die adnexae, endometriosis met uitgebreide vergroeiings en fiksering, vorige abdominale bekken-operasies—maar nie noodwendig nie, tumore van die breë bande, maligniteit met fiksering, fibrose as gevolg van irradiasie terapie, vorige amputasie van die cervix waar Mackenrodt se bande ook verkort is, en waar die uterus groter as 'n agt weke swangerskap is. Nullipariteit is nie noodwendig 'n kontra-indikasie nie en in 'n serie van 2,798 vaginale hysterektomieë het Campbell en sy staf¹⁹ gevind dat byna 'n derde daarvan in nulliparae gedoen is.

Die verskillende indikasies vir hysterektomie is te welbekend om aangestip te word en word goed behandel deur Lee²⁸ en enige moderne teksboek van ginekologie. Die bekken bevindinge wat die operasie in die huidige serie genoodsaak het word uiteengesit in Tabel IV.

Wat myomata betref word daar vandag algemeen aangeneem dat die redes vir 'n hysterektomie een of meer van die volgende is: aansienlike en verlengde menstruasie, druk simptome in die bekken, pyn, 'n uterine massa nie kleiner dan 'n 12 weke swangerskap nie, of wanneer daar geassosieerde ander siektetoestande teenwoordig is. Sulke patologie is gevind in 21 pasiënte in die serie terwyl in die ander 103 twee, of meer, van bogenoemde redes teenwoordig was. Konservatiewe chirurgie word altyd aangewend waar die ouderdom en moontlikheid van verdere swangerskappe die dominerende faktore is en onder sulke omstandighede is myomektomie die aangewese operasie. Victor Bonney is veral 'n welbekende voorstander hiervan en in 'n onlangse artikel²⁹ maak hy weer opnuut 'n pleidooi dat myomektomie meer algemeen behoort gedoen te word. Aangaande myomata gedurende, of na, die

Tabel IV: Bekken Bevindinge

	Aantal	%
Myomata	103	42.9
Korpus Karsinoom	37	15.4
Endometriose	16	6.7
Metropathie Hemorrhagica	14	5.8
Menorrhagie	9	3.8
Prolaps	7	2.9
Atipiese endometriale hyperplasie	7	2.9
Post-menopausale bloeding	6	2.5
Ovariale kieste met salpingitis	6	2.5
Myomata met cervikale poliep	5	2.1
Karsinoom van die cervix	5	2.1
Prolaps met menorrhagie	4	1.7
Myomata met metropathie	4	1.7
Myomata met ovariale kieste	4	1.7
Myomata met salpingitis	3	1.3
Myomata met korpus karsinoom	3	1.3
Myomata met endometriose	2	0.8
Kroniese bilaterale salpingitis	2	0.8
Metropathie met ovariale kieste	2	0.8
Krukenberg tumor	1	0.4
Totaal	240	

menopouse, sal die besluit, of hul alleen gelaat of chirurgies verwyder moet word, hoofsaaklik afhang van 'n versigtige oorweging van elke geval afsonderlik. Om so 'n besluit te kan maak is 'n kennis van die gedrag van sulke tumore tydens die klimakterium nie alleen noodsaaklik nie, maar ook uiters wenslik. Paul Zeit³⁰ het onlangs so 'n studie onderneem wat aansienlik bygedra het tot ons kennis en sy gevolgtrekking is dat as die tumore asimptomaties is, of as hul kleiner as 'n agt weke swangerskap is, 'n hysterektomie nie nodig is nie en dat die pasiënt dan alleen periodiek ondersoek behoort te word. Wanneer vaginale bloeding die hoof klage is moet die moontlikheid van 'n ander oorsaak altyd in aanmerking geneem word en is 'n diagnostiese kurettagie 'n noodsaaklike vereiste. In die huidige serie was daar 9 pasiënte oor die ouderdom van 45 waar 'n ander oorsaak gevind is. Dit is verder ook belangrik om daarop te let dat nie alle myomata kleiner word na die menopouse nie³¹ en Zeit het in sy serie 5 pasiënte gevind in wie die myomata groter geword het. Hierdie is egter nie 'n algemene verskynsel nie en indien dit gevind word moet die moontlikheid van maligne verandering, of die teenwoordigheid van uitgebreide peritumorale vergroeiings en gevolglike toenemende bloeds-toevoer, altyd in aanmerking geneem word.

Pan-hysterektomie was voorheen beskou as al behandelend wat nodig was vir korpus karsinoom, maar deur die jare heen is 'n oervloedige literatuur met groot getalle opvolg-statistieke versamel wat bewys lewer van die meer bevredigende resultate wanneer chirurgie gekombineer word met irradiasie terapie. Hierdie word verder duidelik beklemtoon deur Corscaden³² in 'n artikel waarin die resultate van verskeie werkers saamgevat is. Raadpleging van die literatuur³²⁻⁴⁰ bring egter geen duidelikheid omtrent watter spesifieke kombinasie gevolg moet word nie. Sommige beveel aan sowel pre- as post-operatiewe bestraling, maar daar is weer net soveel wie net 'n post-operatiewe kursus gee. In die huidige 37 gevalle is in almal 'n volle kursus post-operatiewe bestraling gegee en by operasie is altyd gesoek na kliere wat dan verwyder is vir histologiese ondersoek. Die ouderdomme strek van 29 na 70 jaar,

met die grootste aantal tussen 44 en 55 jaar. Pre-operatiewe bestraling is alleen gebruik in gevalle waar daar kliniese bewys was van extra-uterine verspreiding. Ongelukkig is die verslae nie volledig genoeg nie om hierdie gevalle meer in die besonder te ontlee nie en te vergelyk met die ander. Speert en Peightal³³ beweer dat daar alleen 'n geringe, indien enige, teoretiese grondslag bestaan vir die toediening van bestraling pre-operatief in gevalle waar daar tog 'n pan-hysterektomie gedoen gaan word. Hierdie opvatting word verder ondersteun deur syfers wat aangegee word deur Taylor en Becker³⁷ wie gevind het dat in pasiënte wie pre-operatiewe radium ontvang het, daar na vyf jaar nog 50.5% in die lewe was, in vergelyking met 53.5% van pasiënte wie geen radium voor operasie gekry het nie. Die doeltreffendheid van intra-uterine radium varieer verder aansienlik en dit is al bewys dat dit heeltemal onvoldoende is om alle kanker selle te vernietig binne die uterus in omtrent helfte van die gevalle waar dit gebruik word.^{37, 38, 40} 'n Besondere belangrike faktor wat 'n groot uitwerking het op die resultate van behandeling, is die verloop van tyd vanaf die eerste simptome totdat daar met behandeling begin word. Miller en Henderson³⁵ gee 'n periode van 12.5 maande in 1946 in teenstelling met 'n periode van 12.7 maande in 1940 wat verloop het voordat met behandeling begin word. Hierdie veelseggende feit verwek heelwat onrus naamlik dat daar in ses jaar slegs 'n vermindering van gemiddeld 0.2 maande was. Dit is 'n duidelike aanduiding dat daar nog veel gedoen kan word om 'n beter en meer intensiewer kanker-bestryding onder vroue in die algemeen en algemene praktisyns in die besonder, toe te pas. Daar gaan nog glad te veel tyd verlore vanaf die ontstaan van die eerste simptome totdat daar met die nodige behandeling begin word.⁴¹

Daar was vyf gevalle van kanker van die cervix waar 'n Wertheim-tipe van hysterektomie gedoen is. Hierdie was almal vroeë gevalle, maar dit is nog te gou om te kan oordeel omtrent die doeltreffendheid van die operasie. In die afgelope twee jaar word feitlik al hierdie gevalle, of waar daar net suspisie is, ook deur die vaginale smeer tegniek ondersoek en in alle positiese gevalle word dan tog nog biopsie van die cervix gedoen voordat oorgegaan word tot hysterektomie. Die tegniek word breedvoerig beskryf en verduidelik deur Papanicolaou en Traut⁷⁵ en Gates en Warren.⁷⁴

Endometriose was die indikasie in 18 pasiënte, waarvan twee ook myomata gehad het, 'n voorkomssyfer van 7.5%. Die voorkomssyfer van bekken endometriose in die algemeen word aangegee as in die omgewing van 10% te wees deur verskillende werkers.⁴²⁻⁴⁵ Die meeste gevalle kom dan ook voor in die middelste derde van die vrou se reproductiewe lewe, en ooreenkomstig met die algemene opinie,^{42, 44, 46-52} is hierdie departement ook uiters konserwatief in die chirurgiese behandeling van endometriose. Individualisasie van elke pasiënt is uiters belangrik, en die besluit van watter die beste vorm van behandeling gaan wees, gaan afhang van die ouderdom en pariteit, die moontlikheid van verdere swangerskappe, die omvang en mate van lokalisasie van die siekte-toestand. Die behandeling van 'n vrou met endometriose, soos Beecham⁵³ dit uitdruk, vereis die geduld van 'n Job. Wat betref die plek van hysterektomie in hierdie kondisie, beweer Beecham dat dit gereverdig is na die ouderdom van 40 en mits 'n

definitiewe diagnose gemaak kan word. Dit was die geval in agt van die serie. In die ander agt, met ouderdomme van 35 (twee), 36, 37 (twee), 38, 39 (twee), is besluit tot hysterektomie alleen na sorgvuldige oorweging en inagneming van bogemelde aspekte. Al agt het besonder uitgesproke simptome gehad wat hul geheelenal onbekwaam gemaak het om hul daaglikse werk te verrig. Meigs⁵⁴ som die probleem baie goed op as volg: „Surgery for endometriosis should be done only for definite reasons, and significant symptoms are the real guides for such surgery. Just as certain fibroids should not be operated on, so certain patients with endometriosis need not be operated on.” Verdere operasies in gevalle waar voorheen konserwatiewe chirurgie toegepas is, word deur verskillende werkers aangehaal as nodig te wees in van 9% tot 29% van gevalle. In die jonger pasiënte is dit dan ook belangrik dat hul aangeraai word om so gou as moontlik te probeer swanger te raak na konserwatiewe chirurgie.

Daar was 14 gevalle van metropathie, met 'n addisionele vier waar ook myomata teenwoordig was en twee met ovariale kieste. Almal was oor die ouderdom van 37 jaar. Die alternatiewe tipe van behandeling is irradiasie, wat egter in die jonger pasiënt ook die ovariale funksie sal onderdruk. Albei vorms van behandeling word deur meeste as korrekte prosedure beskou in die behandeling van metropathie en keuse sal afhang van die individuele omstandighede. By jongere persone gee behandeling met testosterone in baie gevalle, 'n goeie resultaat.

In 13 gevalle word die bekken bevinding aangegee as menorrhagie, met addisionele prolaps in vier gevalle. In almal behalwe vier, wie se lêers onvoldig ingeval was, is 'n voorlopige diagnostiese kurettagie gedoen wat geen bewys van maligniteit aangetoon het nie. Dit was ook van geen terapeutiese waarde nie daar die ongeheelde en profuse menstruasie weer terugkeer het. Almal was oor 40 en dit is die oorweegde beskouing van hierdie departement dat hormonale terapie, gedurende hierdie lewens-periode, alleen 'n baie klein plek het in die behandeling van funksionele uterine bloeding. Die verhoogde moontlikheid van latere ontstaan van maligniteit moet nooit vergeet word nie, terwyl die betekenis van benigne hyperplasie van die endometrium tydens, of na, die menopouse en sy verhouding tot adenokarsinoom, al voldoende behandel en beklemtoon is deur Emil Novak,^{52, 55, 56, 72} Te Linde,⁵⁷ en andere.^{58, 59, 73} Bestudering van die literatuur⁶⁰⁻⁶⁹ toon dat in sulke gevalle beide hysterektomie en irradiasie terapie sy aanhangers het. Daar moet verder nooit vergeet word nie dat 'n kurettagie partykeer 'n vroeë korpus karsinoom kan mis, of dat die patholoog nie nougeset genoeg is om aanenlopende seksies van die monster noukeurig te ondersoek nie. Hysterektomie is 'n gereverdigde terapeutiese prosedure na die ouderdom van 40 waar daar ernstige en aanhoudende uterine bloeding voorkom, dit funksioneel van aard is en dit nie wil responder op die gewone behandeling nie. Dieselfde argumente geld vir gevalle van post-menopausale bloeding waarvan daar 6 in hierdie serie is. Een vrou was 45, die ander oor die 50. Waar histologiese ondersoek die teenwoordigheid van 'n atipiese hyperplasie van die endometrium aantoon, is hysterektomie vanselfsprekend heeltemaal gereverdig.

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Hysterektomie vir chroniese inflammatoriese massas van die adnexae word nooit, en moet ook nooit, gedoen word in die jonger vrou nie, selfs al word operatiewe inmenging vir die adnexitis noodsaaklik. Vandag word dit vrywel algemeen aangeneem dat die ou ekskuus dat as die tubae en/of die ovaria verwyder moet word, mens net sowel die uterus kan verwyder, glad nie meer aanneembaar is nie. 'n Klein stukkie ovarium kan gewoonlik, en behoort ook altyd, gered te word sodat sulke pasiënte nog menstruasie mag ondervind. Hysterektomie is in hierdie serie op net twee vroue gedoen, 39 en 47 jaar oud, en in geen een is die buik primêr geopen daarvoor nie. By laparotomie is in albei aansienlike peri-uterine vergroeiings gevind met bilaterale tubovariale absees en was die baarmoeder van 'n ongezonder voorkoms.

Daar was 6 gevalle van ovariale kieste met assosieerde salpingitis. Twee was oor die ouderdom van 60 en laparotomie vir die kieste het soveel vergroeiings getoon dat totale verwydering beskou was as 'n minder skokkende operasie. Die ander vier was oor die 44 jaar. Een het 'n vorige laparotomie gehad vir die verwydering van 'n leiomyosarkoom van die uterus, terwyl die ander drie (46, 50 en 52 jaar oud) 'n bilaterale salpingo-oophorektomie moes ondergaan en die uterus ook verwyder is daar dit beskou was as te gevaarlik om 'n potensieel maligne orgaan agter te laat op hierdie ouderdom.

Wat betref die verwydering van 'n normale uterus, kan alleen daarop gewys word dat dit altyd in 'n besonder ernstige lig moet beskou word. Breier en Handley⁷⁰ bespreek hierdie onderwerp en kom tot die gevolgtrekking dat die verwydering van 'n normale uterus toelaatbaar is in die ouer klas vrou waar 'n maligne toestand in die bekken gevind word of tuberkulose van die Fallopiaanse buise, waar daar prolaps teenwoordig is wanneer vaginale hysterektomie gedoen kan word, of daar 'n halstarrige uterine bloeding aanwesig is.

GEVOLGTREKKING

Nadat Miller⁷¹ se voorstel om 'n kykie te neem 'behind the curtain as to whether hysterectomy is done as a surgical racket or a therapeutic necessity', dus uitgevoer is, kan die gevolgtrekking gemaak word dat, ten spyte van 'n paar onvolledige lêers, analise van hierdie serie van 240 hysterektomieë toon dat in geen pasiënt die operasie onnodig gedoen is nie. Miller se stelling dat, hysterektomie, in die afwesigheid van enige siekte-toestand in die bekken, nie geregverdig kan word nie, kan dus heelhartig onderskrif word.

Graag sou ek my innige dank wil uitspreek teenoor prof. L. J. te Groen vir sy gewaardeerde en vriendelike kritiek en hulp met die opstel van hierdie ondersoek.

LITERATUUR

- Danforth, W. C. (1946): Amer. J. Obst. Gynec., **52**, 218.
- von Graff, E. (1932): Amer. J. Obst. Gynec., **23**, 195.
- Meigs, J. V. (1936): Amer. J. Obst. Gynec., **31**, 358.
- Masson, J. C. (1940): Amer. J. Surg., **48**, 255. Masson, J. C. (1945): Proc. Staff Meetings Mayo Clinic, **20**, 491.
- McDonough, J. J. (1948): Ohio State J. Med., **44**, 914.
- Davis and Cheek (1946): J. Amer. Med. Assoc., **131**, 816.
- Crawford et al. (1949): Surg. Gynec. Obst., **88**, 465.
- Hunt, C. J. (1946): Amer. J. Surg., **71**, 723.
- Mohler and Bishop (1945): Amer. J. Obst. Gynec., **50**, 489.
- Weir, W. C. (1948): Amer. J. Obst. Gynec., **56**, 1151.
- Foss, H. L. (1945): Ann. Surg., **121**, 680.
- Counseller et al. (1945): Lancet, **65**, 26.
- Feeney, J. K. (1947): Irish J. Med., Jan., p. 1.
- Novak, E. (1949): Gynec. Obst. Survey, June 1949, footnote p. 495.
- Greenhill, J. P.: Yearbook Gynec. & Obst., *Editorial notes*.
- Averett, L. (1945): J. Internat. Coll. Surg., **8**, 53.
- Danforth, W. C. (1945): Amer. J. Obst. Gynec., **50**, 376.
- Falk and Bunkin (1946): Amer. J. Obst. Gynec., **53**, 623.
- Campbell, Z. B. (1946): Amer. J. Obst. Gynec., **53**, 598.
- Stearns, H. C. (1946): West. J. Surg., **55**, 220.
- Counseller, V. S. (1946): South. Med. J., **40**, 701.
- Waugh, J. M. (1946): Surg. Clin. N. Amer., **27**, 796.
- Rhoads and Zeit (1946): Amer. J. Obst. Gynec., **51**, 533.
- Phaneuf, L. E. (1948): Amer. J. Obst. Gynec., **55**, 646.
- Jones, H. O. (1948): Texas State J. Med., **43**, 688.
- Averett, L. (1938): Amer. J. Obst. Gynec., **35**, 978.
- Waugh, J. M. (1943): J. Indiana Med. Assoc., **36**, 537.
- Lee, A. F. (1945): Internat. Surg. Digest, **40**, 116.
- Bonney, V. (1947): J. Mt. Sinai Hosp., **14**, 152.
- Zeit, P. R. (1949): Amer. J. Obst. Gynec., **58**, 153.
- Frank, R. T. (1926): Gynecological and Obstetrical Pathology, New York: D. Appleton Century Co.
- Corscaden, J. A. (1944): J. Amer. Med. Assoc., **126**, 1134.
- Speert et al. (1948): Amer. J. Obst. Gynec., **56**, 502.
- Scheffey et al. (1946): Amer. J. Obst. Gynec., **52**, 529.
- Miller and Henderson (1946): Amer. J. Obst. Gynec., **52**, 894.
- McGoogan and Hunt (1948): Arch. Surg., **56**, 172.
- Tawlor and Becker (1949): Surg. Gynec. Obst., **84**, 129.
- Stowe, L. M. (1946): Amer. J. Obst. Gynec., **51**, 57.
- Rickford, B. (1949): J. Obst. Gynec. Brit. Emp., **56**, 41.
- Gray et al. (1946): Surg. Gynec. Obst., **82**, 386.
- Howson, J. V. (1948): Med. Clin. N. Amer., **32**, 1373.
- Meigs, J. V. (1942): New Eng. J. Med., **226**, 147.
- Haydan, J. (1942): Amer. J. Obst. Gynec., **43**, 704.
- Allen, E. (1933): Amer. J. Obst. Gynec., **24**, 803.
- Fallas and Rosenblum (1940): Amer. J. Obst. Gynec., **39**, 964.
- Schmitz and Towne (1948): Amer. J. Obst. Gynec., **55**, 583.
- Macleod, D. (1946): Brit. J. Surg., **34**, 109.
- Beecham, C. T. (1946): Amer. J. Obst. Gynec., **52**, 707.
- Abell and Abell (1947): Internat. Surg. Digest, **44**, 101.
- Morse, A. H. (1945): Internat. Surg. Digest, **40**, 365.
- Cron, R. S. (1948): Internat. Surg. Digest, **46**, 118.
- Novak, E. (1920): J. Amer. Med. Assoc., **75**, 292.
- Beecham, C. T. (1949): J. Amer. Med. Assoc., **139**, 971.
- Meigs, J. V. (1948): Annals Surg., **127**, 795.
- Novak, E. (1947): Gynecological and Obstetrical Pathology, Philadelphia & London: W. B. Saunders & Co.
- Novak, E. (1948): Textbook of Gynecology, Baltimore: Williams & Wilkins Co.
- Te Linde, R. W. (1946): Operative Gynecology, Philadelphia: J. Lippincott & Co.
- Taylor, H. C. (1932): Amer. J. Obst. Gynec., **23**, 309.
- Novak and Yui (1936): Amer. J. Obst. Gynec., **32**, 674.
- Urdan and Kliegler (1945): Yearbook Gynec. Obst., p. 505.
- Meigs, J. V. (1944): New Eng. J. Med., **231**, 549.
- Goldzieher (1945): J. Clin. Endocrin., **5**, 132.
- Henry (1945): Yearbook Gynec. Obst., p. 513.
- Freed, S. C. (1946): Yearbook Gynec. Obst., p. 602.
- Mckelvey and Samuels (1947): Amer. J. Obst. Gynec., **53**, 627.
- Schmitz and Towne (1947): Amer. J. Obst. Gynec., **53**, 199.
- Davis, M. E. (1947): Med. Clin. N. Amer., **31**, 223.
- Greenhill, J. P. (1947, 1948): Yearbook Gynec. Obst., Edit. notes, 1947, p. 525; 1948, pp. 538, 546.
- Curtis, A. H. (1947): J. Amer. Med. Assoc., **135**, 560.
- Breien and Handley (1947): Amer. J. Obst. Gynec., **54**, 321.
- Miller, N. F. (1946): Amer. J. Obst. Gynec., **51**, 804.
- Novak and Rutledge (1948): Amer. J. Obst. Gynec., **55**, 46.
- Papanicolaou and Traut (1945): Diagnosis of Uterine Cancer by the Vaginal Smear, New York: Commonwealth Fund.
- Gates and Warren (1948): Handbook for the Diagnosis of Cancer of the Uterus by Use of Vaginal Smears, Cambridge, Massachusetts: Harvard University Press.
- Randall, C. L. (1945): J. Amer. Med. Assoc., **127**, 20.

South African Medical Journal

Suid-Afrikaanse Tydskrif vir Geneeskunde

EDITORIAL

STANDARDIZATION OF COBRA ANTIBODY

The Permanent Commission on Biological Standardization of the League of Nations recommended that studies be undertaken with a view to the standardization of antivenenes. As a result of research carried out at the South African Institute for Medical Research in Johannesburg, Professor E. Grasset had shown¹ that it is possible to determine with sufficient accuracy the neutralizing power of African anti-viper-venom serum (*Bitis arietans*) and anti-cobra-venom serum (*Naja flava*), as well as the respective cobra and viper antibodies contained in the polyvalent anti-snake-venom serum prepared at the Institute, by using the method of titration at various levels of Banic and Ljubetic, as modified by Ipsen.

Professor Grasset has recently published in the *Bulletin of the World Health Organization*² the results of his work at Johannesburg in which the same method was applied when assaying cobra antibody contained in concentrated therapeutic polyvalent sera destined for public use. The accurate assay of this antibody appears to be particularly important, as its neutralizing power is, relatively speaking, much less (in a ratio of 1:10) than that of the antibody *Bitis arietans* and is capable of varying considerably according to the origin of the various sera.

Research work, carried out according to the assay method used previously by the author,³ related to a series of 12 polyvalent antivenenes having widely varying neutralizing powers, and obtained by two different methods, seven sera being concentrated by fractional precipitation, and five sera purified by pepsin digestion and concentrated by ammonium sulphate. Two concentrated venoms of different toxicity, which had not varied over a period of four years, were used as antigens. The various serum-venom mixtures containing increasing doses of venom, the difference between doses being 0.0025 mg. to 0.01 mg. for the same amount of each serum, were injected into a number of mice which varied, according to the sera, from 2 to 8. Titration was carried out at four levels of serum: 0.3, 0.2, 0.1 and 0.05 ml.

The potency of each serum was calculated in two ways:

1. Using the formula of Banic and Ljubetic as adapted by Ipsen, in which the titres obtained at the different levels are introduced in pairs, in all possible combinations, thus—titration having been carried out

1. Bull. Hlth. Org. L. o. N., 1941, 9, 476.
2. Bull. World Hlth. Org., 1949, 2, 69.
3. Bull. Hlth. Org. L. o. N., 1941, 9, 476.

VAN DIE REDAKSIE

DIE STANDARDISERING VAN KOBRA-TEENSTOF

Die Volkebond se Permanente Kommissie in sake Biologiese Normalisering het aanbeveel dat teengifsoorte teen slangbyt met die oog op standaardisering bestudeer moet word. As gevolg van navorsing wat by die Suid-Afrikaanse Instituut vir Mediese Navorsing in Johannesburg gedoen is, het prof. E. Grasset¹ bewys dat dit moontlik is om die neutraliserende krag van die serum teen addergif (*Bitis arietans*) en die serum teen kobragif (*Naja flava*) asook die onderskeie kobra- en adderteenstowwe in meerwaardige serum teen slangbyt wat by die Instituut berei word, met genoegsame noukeurigheid te bepaal deur Banic en Ljubetic se titreringsmetode by verskillende stadiums, soos deur Ipsen gewysig, te gebruik.

Prof. Grasset het onlangs in die *Bulletin of the World Health Organization*² die resultate van sy werk in Johannesburg gepubliseer waarin dieselfde metode aangewend is as dié vir die bepaling van kobra-teenliggame in gekonsentreerde geneeskundige meerwaardige serums wat vir gebruik deur die publiek bedoel is. Die presiese bepaling van hierdie teenstof skyn veral belangrik te wees aangesien die neutraliserende krag daarvan, betreklik gesproke, baie kleiner is (in 'n verhouding van 1:10) as die teenstof *Bitis arietans* en dit aansienlik kan wissel volgens die oorsprong van die verskillende serums.

Navorsingswerk gedoen volgens die metode van berekening voorheen deur die skrywer³ aangewend, het betrekking gehad op 'n reeks van 12 meerwaardige teengifsoorte met hoogs uiteenlopende neutraliserende krag wat deur middel van twee metodes verkry is: Sewe serums is deur fraksionele presipitasie gekonsentreer en vyf serums is deur pepsienvertering gesuiwer en deur middel van ammoniumsulfaat gekonsentreer. Twee gekonsentreerde gifsoorte van verskillende gifsterkte wat nie oor 'n tydperk van vier jaar gewissel het nie, is as antigene gebruik. Die verskillende mengsels van serum en gif met toenemende hoeveelheid gif, en met die verskil in die dosisse 0.0025 mg. tot 0.01 mg. vir dieselfde hoeveelheid van elke serum, is in 'n aantal muise ingespuut wat volgens die serums van 2 tot 8 gewissel het. Titrasië is by vier stadiums van die serum uitgevoer: 0.3, 0.2, 0.1 en 0.05 ml.

Die kragtigheid van elke serum is op twee maniere bereken:

1. Deur die gebruik van die formule van Banic en Ljubetic soos deur Ipsen gewysig, waarby die titers wat by die verskillende stadiums verkry word in pare in alle moontlike kombinasies gebruik word sodat ses verskillende resultate verkry word—aangesien titrasië

1. Bull. Hlth. Org. L. o. N., 1941, 9, 476.
2. Bull. World Hlth. Org., 1949, 2, 69.
3. Bull. Hlth. Org. L. o. N., 1941, 9, 476.

at four levels—giving six different results, and a mean titre is then calculated;

2. By direct calculation at each level, after deducting the amount of venom which can be tolerated by the organism in the absence of a specific antivenene—i.e. 4/5 of the certainly lethal dose (c.l.d.) according to Banic and Ljubetic. Following computation, four distinct results are obtained for each serum, on the basis of which a mean titre is also calculated.

Tables accompanying Professor Grasset's article give detailed results of titration calculations for each serum according to both methods. On the whole, these results show only slight discrepancies. When using the first method (titration at various levels), the discrepancy noted between extreme titres (maximum and minimum) obtained for a single serum varies between 0 and 10% for seven of the 12 sera, and reaches a maximum of 22% in the case of two sera. When using the direct computation method at each level, titration discrepancies vary between 0 and 21%, and are less than 5% for more than half the sera (seven out of 12).

A comparison of results obtained by the two methods of calculation shows that for a single serum there are slight variations from one titre to another, the difference being less than 5% for 10 sera and reaching 12% for one serum only.

The author believes that, in the multiple-level method, titration at the lowest level (0.05 ml. of serum) shows certain discrepancies, probably due to the fact that the mixtures contain a dose of venom which is too weak.

The quantity of venom contained in a mixture should not be less than 5 c.l.d., according to Professor Grasset. It would therefore be preferable to limit titration to the three levels of 0.3, 0.2 and 0.1 ml. of serum. On the other hand, the accuracy of titration seems to increase if the intervals between increasing doses of venom contained in the various serum-venom-mixtures are relatively small—0.005 mg. for example—and if each mixture is injected into a sufficient number of mice.

Of the three higher levels, that of 0.2 ml. seems to offer the most regular titrations. A comparison of titres obtained by direct computation at this level (after the deduction of 4/5 c.l.d.) and mean titres obtained by the formula at various levels shows remarkable uniformity. Differences between the two series of results oscillate between 0.15% and 2.18% for nine out of 12 sera, and between 4% and 6% for two others; in one case only does the difference amount to 11%. Titration at the level of 0.2 ml. of serum seems to offer adequate guarantees of accuracy and regularity for determining the neutralizing power, and mixtures produced at this level always contain a sufficient number of c.l.d. of venom. In addition, a volume of 0.2 ml. of serum allows for adequate doses of venom and the complementary saline solution which is required to bring the volume up to the 0.5 ml. injected into each animal. Moreover, titration at a single level means a considerable saving both in standard venom used as antigen, and in the number of animals required for titration operations.

by vier stadiums gedoen is—en dan 'n gemiddelde titer te bereken.

2. Deur regstreekse berekening by elke stadium nadat die hoeveelheid gif wat deur die organisme in afwesigheid van 'n spesifieke teëgif verdra kan word, afgetrek is—d.w.s. volgens Banic en Ljubetic, 4/5 van 'n beslis dodelike dosis (b.d.d.). Na berekening word vier definitiewe resultate vir elke serum verkry waarvolgens 'n gemiddelde titer ook bereken word.

Tabelle by prof. Grasset se artikel gee uitvoerig die resultate van titrasieberekenings vir elke serum volgens albei metodes. In die geheel toon die resultate slegs klein afwykings. Wanneer die eerste metode (titrasie by verskillende stadiums) gebruik word, is die verskil wat opgemerk word tussen die uiterste titers (maksimum en minimum) ten opsigte van een serum verkry, tussen 0 en 10% vir sewe uit die twaalf serums en bereik dit 'n maksimum van 22% in die geval van twee serums. Wanneer die regstreekse metode van berekening by elke stadium gebruik word, is die titrasieverskille tussen 0 en 21% en is dit vir meer as die helfte van die serums (7 uit 12) minder as 5%.

'n Vergelyking van die resultate wat verkry is deur die twee metodes van berekening, toon dat daar ten opsigte van 'n enkele serum klein verskille ten opsigte van elke titer-gemiddelde is, wat in die geval van 10 serums minder as 5% is en wat in die geval van slegs een serum tot 12% styg.

Die skrywer meen dat in die geval van die metode met meervoudige stadiums, titrasies by die laagste stadium (0.05 ml. serum) sekere afwykings toon, waarskynlik weens die feit dat die mengsels te min gif bevat.

Die hoeveelheid gif in die mengsel moet, volgens prof. Grasset, nie minder as 5 b.d.d. wees nie. Dit sal dus verkieslik wees om titrasies tot die stadiums 0.3, 0.2 en 0.1 ml. van die serum te beperk. Aan die ander kant lyk dit of die juistheid van die titrasies toeneem indien die pouse tussen die vergroting van die hoeveelhede gif in die verskillende mengsels serum en gif, betreklik klein is—0.005 mg. byvoorbeeld—en indien elke mengsel in genoeg muise ingespuut word.

Van die drie hoër stadiums skyn dié van 0.2 ml. die gereeldste titrasies te lewer. 'n Vergelyking van die titers wat deur regstreekse berekenings by hierdie stadium verkry word (na aftrekking van 4/5 b.d.d.) en die gemiddelde titers wat deur die formule en verskillende stadiums verkry is, toon buitengewone eenvormigheid. Verskille tussen die twee reekse resultate wissel tussen 0.15% en 2.18% vir nege van die 12 serums en tussen 4% en 6% vir twee ander; slegs in een geval is die verskil 11%. Titrasies by die stadium 0.2 ml. serum skyn genoegsame waarborg van juistheid en reëlmaticgheid te gee om die neutraliseringskrag te bepaal en mengsels wat by hierdie stadium gelever word, bevat altyd genoegsame hoeveelhede b.d.d. van die gif. Daarbenewens maak 0.2 ml. van die serum voorsiening vir toereikende dosisse van die gif en die aanvullende soutoplossing wat nodig is om die volume op 0.5 ml. (wat in elke dier ingespuut word) te staan te bring. Dan ook beteken titrasie by 'n enkele stadium 'n aansienlike besparing beide wat betref die standaardgif wat as antigeen gebruik word en die aantal diere wat vir titrering nodig is.

A SIMPLE AND SUCCESSFUL TECHNIQUE FOR THE REPAIR* OF VESICO-VAGINAL FISTULAE WITH RESULTS ON 72 CASES

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In those parts of the world where urinary fistulae following labour are commonest, the results of treatment are often most unsatisfactory. This applies also to South Africa.

A few series of cases with satisfactory cure-rates have been published, but they only serve to emphasize the poor results which are usually obtained.

One's impression both in India and South Africa is that in many hospitals either no attempt is made to treat these cases or else their ureters are transplanted into the colon almost routinely (e.g. Murray and Ahmed 1943) with a consequent reduction in the patient's expectation of life.

The main reason for the low general level of treatment of vesico-vaginal fistulae seems to be that the standard procedures are too difficult for the average surgeon.

Mahfouz (1938) who has operated on over 400 cases states that 'the operation requires long experience, dexterity, precision, and careful attention to a multitude of details'. This leaves us with very few surgeons competent to attempt it!

Any young surgeon seeing Mahfouz's diagrams and reading his descriptions would certainly shrink from attempting his methods.

The time factor is also important. Few surgeons in 'under-privileged' areas where these fistulae are commonly seen can afford the weary hours which are so often necessary for the usual flap-splitting operations.

By the simpler technique described here the majority of fistulae can be repaired in less than 45 minutes.

Apart from these general considerations flap-splitting operations would seem to be unsound on theoretical grounds. The blood supply must inevitably be impaired by dissecting free the various layers of the vesico-vaginal septum, and when the operation is successful in spite of the surgeon, then Nature ignores his pathetic regard for detailed anatomy and again fuses the layers into one firm scar!

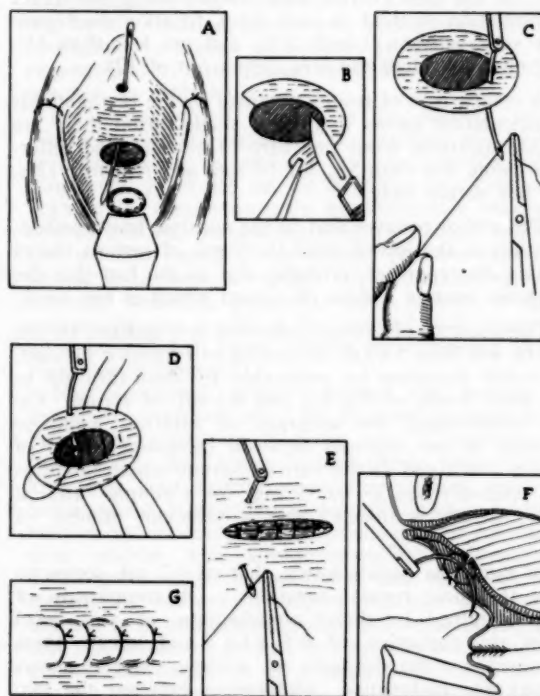
In modern times Chassar Moir (1947) has revived the Sims operation (1852) with striking success. This method of applying silver wire sutures with special instruments will however, probably not appeal to the majority of surgeons in Mission hospitals and other outlying centres where most of these cases are seen (e.g. Joubert 1944).

The Sims technique has also the disadvantage of employing only one layer of sutures. Where there is some tension on the suture line, a second, superficial layer (see Figs. A to G) takes the tension off the more important deeper sutures.

* This paper was read at the Medical Congress of the Association held at Cape Town in September 1949.

Counsellor (1945) also objects to silver wire because portions may work themselves into the bladder causing severe dysuria.

However, Moir (1947) cured 40 consecutive cases by this method which proves that in skilled hands it can be highly successful.



Sims attributed the success of his operation largely to the silver wire he used. No doubt in the days prior to asepsis and modern antibiotic drugs he was right in doing so, but at the present time, the use of such clumsy material is hardly justified.

The Sims paring technique without the employment of the silver wire gave excellent results in this series of cases (see Table). Ordinary chromic catgut (20 day) was used. It has stood the test of time for all other vaginal plastic operations, and one's experience has shown that it can give equal satisfaction in vesico-vaginal fistulae.

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CLASSIFICATION OF VESICO-VAGINAL FISTULAE

(a) *Simple Cases.* The great majority of cases (74%) were classed as simple, since their repair presented little technical difficulty. The urethra was not seriously damaged and the edges of the fistula could be brought into satisfactory apposition after paring (if necessary with the use of relaxing incisions). It is realised however, that, surgeons using an ordinary needle and needle-holder might have called some of these cases inaccessible and inoperable. In fact more than one of these cases classified as simple here had been considered inoperable by other surgeons.

A grossly contracted vagina does not present any operative difficulty since it can be laid open. With suitable technique, the position and the size of the fistula are also matters of relatively little importance.

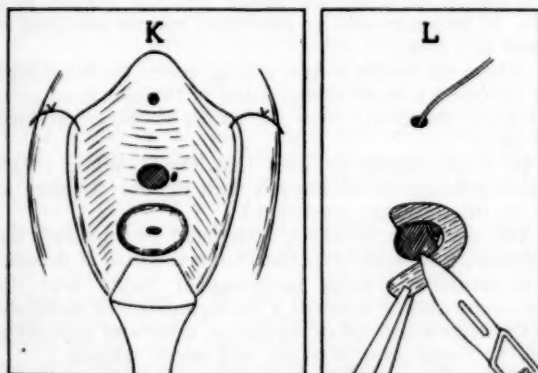
The much quoted statement of Murray and Ahmed that pin-point fistulae and fistulae larger than a shilling are inoperable, and that of Joan Thompson (1945) and others that some fistulae are inoperable because of their inaccessibility, are merely confessions of technical inadequacy.

(b) *Presence of Ureteric Orifices in or near the Fistula Edge.* This represents only a minor complication if recognised at operation. Failure to recognise it means that the suture line will inevitably break down.

Where the fistula is far back in the vagina, a careful search using a probe, should be made for the ureteric orifices. If necessary an intravenous injection of 4 c.c. of a 0.4% solution of indigo carmine intravenously may be used.

This complication was found in four (5%) of cases.

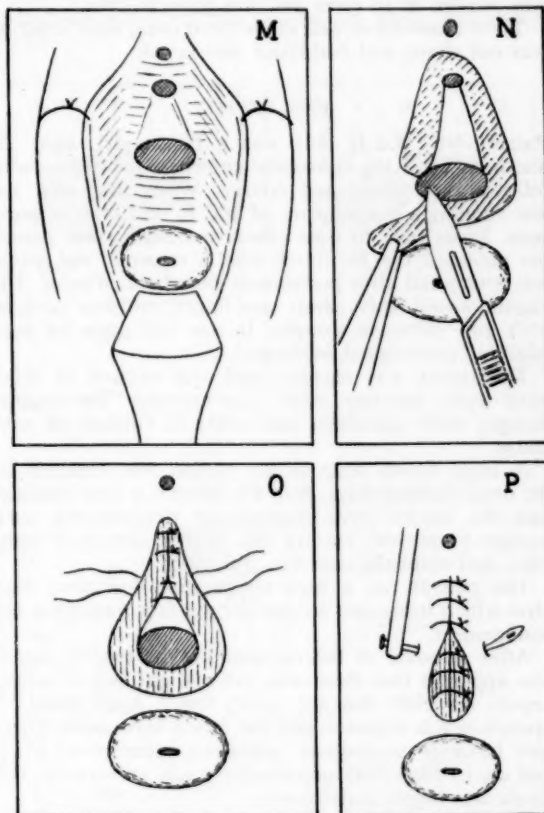
Cystoscopic examinations and intravenous pyelograms were not found to be of much practical value in these circumstances. The operative technique used in these cases is shown by Figures K and L.



(c) *Fistulae with Damage to the Urethra.* Where only the deeper part of the urethra is damaged, no interference with urinary control need be anticipated and the operation is completed as in simple fistulae.

In other more serious cases there may appear to be a large gap between a short remnant of urethra and the bladder (Fig. M). This does not represent avulsion of part of the urethra, but is caused by pressure necrosis

extending into the urethral floor. Although there is no sign of it, the roof of the urethra containing a segment of sphincteric muscle still remains. This remnant can be utilised to restore control of urine (Hayes 1945). Operations were carried out in nine such cases (Figs. M, N, O, P).



(d) *Where Apposition of the Fistula Edges cannot be Attained.* In only six cases could satisfactory apposition not be attained in spite of deep relaxing incisions. This state of affairs occurs when there is a very large fistula associated with extreme fibrosis making the tissue cartilaginous to the touch, the lateral edges being adherent to the pubes.

These relatively uncommon cases are the only serious problems encountered, and the fact that only once was it necessary to transplant ureters into the sigmoid colon shows that there is only a limited place for this operation.

PRE-OPERATIVE CARE

Does Local Sepsis Matter? Most writers on the subject make great play of the importance of cleaning up local sepsis pre-operatively. One's experience is that such sepsis can only be cleared up with great difficulty before closure of the fistula, whereas it clears up rapidly after

a successful operation. It is confined mainly to the vagina, bladder sepsis being of an unimportant degree.

(Where there is acute puerperal parametritis this should, of course, be controlled before repairing the fistula.)

In this series, due largely to pressure on bed-space, no attempt was made to clear up vaginal sepsis, which was present in 16 cases and was gross in four.

These cases did as well as the clean ones, their suffering was cut short, and bed-space was saved.

CASE REPORT

Patient No. N.E.H. 831 was a Bantu girl, aged 29. She had been lying in hospital elsewhere for two months following an obstructed labour. When first seen she was running a temperature of 100°F. and was in great pain. From time to time offensive sloughs were passed *per vaginam*. On 10 March 1948 a repair of the fistula was attempted after preliminary blood transfusion. The vagina would only admit one finger and was covered with grey offensive sloughs. It was laid open by deep bilateral paravaginal incisions.

The cervix was necrotic and was excised in slices until freely bleeding tissue was exposed. The vaginal sloughs were superficial and could be rubbed off with gauze.

A large fistula deep in the vagina was repaired by the usual method (Figs. A to F). There was free bleeding, and the tissues were oedematous necessitating deep sutures to prevent cutting out. A full course of penicillin and sulphadiazine was prescribed.

The patient ran a high temperature for three days after which it became normal for the first time since her confinement.

After removal of the catheter on the twelfth day it was apparent that there was still a slight leak of urine. Sepsis, however, did not recur. On 7 April 1948 the operation was repeated and the fistula was cured. There was however inadequate sphincteric control of urine and on 13 May 1948 urethroplasty was performed. The result was highly satisfactory.

Four fresh fistulae were operated on within a month after delivery. In one case the slough was actually snipped away at the time of the operation.

OTHER PRE-OPERATIVE MEASURES

The importance of pre-operative *cystoscopy* is greatly overstressed in the literature (e.g. Counsellor 1942). It is difficult to carry out under the circumstances and its practical value is doubtful.

Likewise routine *intravenous pyelograms* were found to be of little value in this series of cases.

In anaemic patients however, pre-operative *blood transfusion* is of value. Where there is a recto-vaginal fistula sulphasuccidine pre-operatively should be prescribed.

OPERATIVE TECHNIQUE

A. Simple Cases. The lithotomy position with slight Trendelenberg tilting is satisfactory. A low spinal is the anaesthetic of choice.

If adequate access is not available deep unilateral or bilateral episiotomy incisions are necessary, or if there is an associated recto-vaginal fistula it is converted into a third degree tear in the usual way, and an Auvard's speculum is then inserted into the rectum. (The recto-vaginal fistula is repaired immediately after the vesico-vaginal fistula.)

The fistula is carefully inspected, and a search is made for the ureteric orifices, especially if the fistula is far back in the vagina.

A sound is passed down the urethra as it is occasionally obstructed (four cases in this series) and may require preliminary dilatation.

The fistula edge is then pared as far as the bladder mucosa, and two layers of No. 1 (14 day) chromic catgut are inserted as shown in Figs. A to G.

A Reverdin's needle is an excellent means of placing sutures in inaccessible positions and its use is recommended. It has become standard gynaecological equipment since its popularisation by Bonney, but is probably not available in every operating theatre.

If used as shown in the diagrams, inaccessibility ceases to be a serious matter. Sometimes difficulty may be encountered in passing the needle through the posterior lip of the fistula. This is easily overcome by applying counter-pressure with another instrument, such as an Allis tissue forceps or a blunt curette.

All stitches must bite deeply into the tissues, otherwise they may cut out.

An important detail is the tying of the sutures with just sufficient tension to approximate the tissues without strangulation. This may be difficult in fistulae which are far back in the lateral fornices. This difficulty may be overcome by an assistant lightly gripping the first loop of the knot with a haemostat until the second loop is tied.

Before the superficial layer of sutures is inserted, a few ounces of water are passed into the bladder as a test. If necessary one or two extra sutures are used to close any leaks.

Where the fistula is near a large cervix (as was found in six cases) a slight modification of the operation so as to apply the cervix over the fistula is shown in Figs. H to J.

(It is interesting to note that David White (1935) cured a fistula by covering it with the corpus uteri, as in an interposition operation.)

The operation is finally completed by repairing the episiotomy wounds or a recto-vaginal fistula if present.

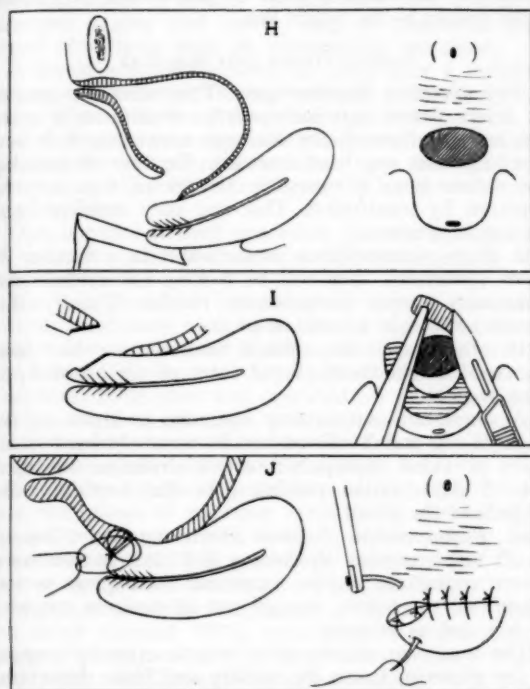
Incidentally a large recto-vaginal fistula near the cervix can only be repaired if the rectum is well mobilised in the neighbourhood of the fistula, otherwise apposition will be found unsatisfactory and under tension.

If there is excessive oozing the vagina may be plugged with vaseline gauze for 24 hours.

A catheter is tied in, as described in the section on post-operative care.

B. Repair where the Ureteric Orifices are near or in the Edges of the Fistulae. Where this important minor complication is observed a ureteric catheter should be passed up the ureter, and the other end brought out through the urethra. This has the effect of turning the

ureteric orifice inwards, making it easily avoidable in the subsequent suturing of the fistula. (See Figs. K and L).



C. Repair where there is Serious Damage to the Urethra. Where the floor of the urethra has sloughed away together with part of the bladder, repair may be effected as shown in Figs. L, M and N.

In cases with severe fibrosis deep relaxing incisions on each side of the suture line may be required.

A 'T' shaped suture-line should be avoided if possible, though in one case it was used successfully for the deeper layer only, which was embedded in a curved superficial line of sutures (Case 9). In another a 'T' shaped suture line was embedded by covering it with the cervix (Case 21).

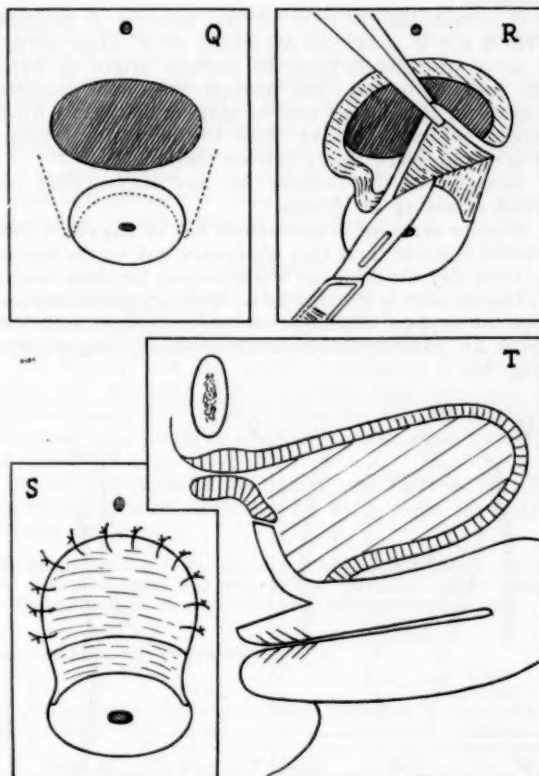
As a rule, however, when the urethra requires reconstruction it is better for the suture line in the bladder to be continuous with, and in the same line as the urethral suture line (Figs. M, N, O and P).

Suprapubic suction drainage is advisable after urethral repair, as it allows complete rest to the part. This is carried out after completion of the vaginal operation.

The same suction apparatus is used as for urethral drainage (see section on post-operative care).

D. Repair when the Fistula Edges cannot be Approximated. Where even with relaxing incisions approximation of the fistula edges obviously cannot be attained, the problem is difficult. In these cases the tissues are densely fibrosed and adherent to bone. There were five such cases in this series.

In two cases Nos. 20 and 27 a well-developed cervix was present, which was utilised to cut a flap (Figs. Q, R, S and T). This flap was turned up and sutured to the anterior edge of the fistula. On filling the bladder at completion of the operation No. 20 appeared satisfactory but No. 27 leaked all along the suture line, which was therefore re-inforced with a flap of muscle tissue fashioned from the side of the deep episiotomy wound.



Both these cases did well in spite of vaginal sepsis. The raw area left over after the operation was healed when examined 21 days later.

In cases Nos. 49 and 52 there was no cervical tissue which could be utilised in this way. The bladder posterior to the fistula was mobilised and brought across the fistula leaving a raw area. Case No. 49 healed well, but No. 52 broke down and is still in hospital, requiring further operative treatment.

Case No. 10 has been unsuccessfully operated on several times. Her recto-vaginal fistula has been repaired and her huge urinary fistula has been reduced to a crack amidst dense fibrous tissue. Transplantation of her ureters was considered but her anal sphincter is inadequate for this purpose. A tube graft has now been prepared with which to cover the fistula. She is still in hospital.

Case No. 11 had a vagina only $\frac{1}{2}$ -inch long opening directly into her bladder, into which intercourse had been taking place.

One attempt at repair was unsuccessful and her ureters were transplanted.

POST-OPERATIVE TREATMENT

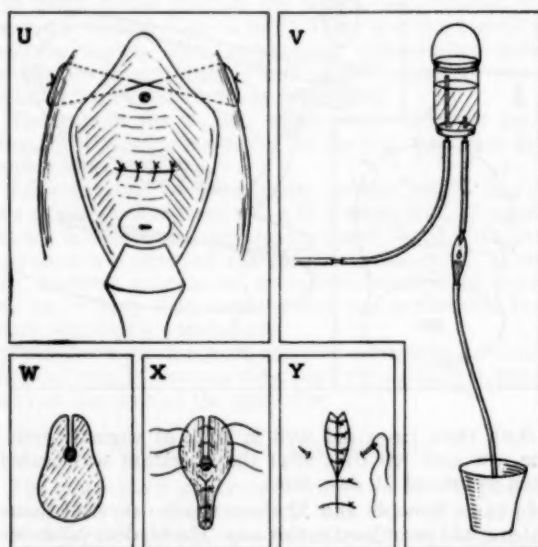
Drainage. At the end of the operation a self-retaining catheter about $\frac{1}{4}$ -inch in diameter is inserted through the urethra.

It is essential for it to be tied securely in position. This is not as simple as one might think. Moir advised a silver wire suture near the urethral orifice to which the catheter is tied. The method used with complete success in this series, was to make a bridge of nylon thread across the vulva close to the urethral orifice (Fig. U) to which the catheter is tied.

Removal of the catheter for any reason does not entail removing the bridge.

Bladder drainage is maintained for 10 days as a rule. Should however there be a temporary leak on the second or third day the drainage is maintained for three weeks.

The catheter is attached to an ordinary gastric suction type of syphon drainage, in which a drip indicator (from an intravenous saline apparatus) is incorporated (Fig. V).



This simple apparatus has proved most satisfactory in our wards. The patient may lie in any position she likes. She (and the staff) can see at a glance whether urine is draining.

An inspection chart is kept, on which the nurse on duty reports three-hourly in writing, whether the urine is draining properly. This ensures proper supervision and avoids the misfortune of a blocked catheter and a burst suture line.

Antibiotic Drugs are administered routinely for the first week.

Occupational Therapy is most valuable especially if a urethroplasty has been performed.

An illiterate patient lying for long periods with nothing to occupy her mind is liable to masturbate with disastrous results to the suture line.

COMPLICATIONS AND SEQUALAE

i. **Post-operative Haemorrhage.** This occurs in greater or lesser degree not infrequently. It may take place vaginally or through the drainage apparatus. It is best not to permit any local treatment for fear of harming the suture line. If necessary the blood loss may be replaced by transfusion. This was only required once in our experience.

ii. **Post-operative Stress Incontinence.** In a number of cases sphincteric tone will be lacking for a while and temporary stress incontinence results. Usually this passes off within a week or two.

In other cases the urethral musculature has been damaged at childbirth. Some form of urethroplasty is then required.

A simple and satisfactory operation is illustrated by Figs. W, X and Y. Good results were obtained in all cases provided suprapubic suction drainage was used for 15 days. Urine passing over the operation site prejudices the result.

iii. **Post-operative Vaginal Shortening and Stenosis.** In 25 cases vaginal shortening and cicatrization were severe enough to require treatment subsequent to the closure of the fistula, though not all patients returned to hospital as advised.

The treatment usually given was to open up a space in the posterior fornix by incision and blunt dissection, into which a glass or plastic mould was inserted. A few days later the patient was discharged from hospital with instructions to wear the mould continuously for six months except during intercourse and washing. In two cases an epithelial grafting technique was used.

In three cases the pouch of Douglas was opened accidentally. In one of these a mould covered by epithelial grafts, as in the McIndoe technique, was inserted into the pouch of Douglas. The foot of the bed was raised to keep intestines out of the way. Adhesions rapidly sealed off the mould from the rest of the peritoneal cavity, and the skin grafts took beautifully onto the peritoneum!

RESULTS OF TREATMENT

Of a total of 72 cases, sixteen were treated in India (in the Civil Hospitals of Chaman, Coorg and Ajmer). They were, on looking back, all comparatively straightforward cases, and only one required a second operation before it was cured. There were 55 Bantu patients, 16 Indian and one European.

At the Johannesburg General group of hospitals, 56 cases were operated on in 16 months (see Table) i.e. at an approximate rate of four a month.

There was one anaesthetic death at the commencement of a straightforward operation.

There was one failure (Case No. 11, to which reference has already been made). Her ureters were successfully transplanted into the descending colon.

Two other serious cases are still under treatment. Otherwise all were cured of their fistulae. It must be remembered however that a proportion of these cases, although cured of urinary incontinence have a grossly damaged vagina and cervix, and so menstrual and sexual physiology may be permanently disrupted.

A fistula was only considered cured after a satisfactory report from the nursing staff and a careful gynaecological examination before discharge from hospital.

Excluding the two cases still under treatment and the one anaesthetic death, the corrected cure rate was 98% whereas counting these as failures the uncorrected cure rate was 94%.

Only one case refused operation. She had a bare area of necrotic bone the size of a half-crown under the symphysis pubis.

She was given the alternative of vaginal treatment with a preliminary bone operation, or else transplantation of her ureters with a subsequent bone operation. She became alarmed at the prospects and refused all treatment. (One case was operated on at Vereeniging but as the post-operative care was not under one's control and as the result of the operation is not known, it has been excluded from this series.)

Except for Chassar Moir's 40 cases with 100% cure-rate one knows of no other series giving such a satisfactory picture as this, especially when taking into consideration the 100% operability rate, and that there were no long delays for sepsis to be controlled.

Mahfouz obtained 95% cures in his last 100 cases but never claimed 100% operability. Emmett, Sims' successor, obtained a 70% cure, George Gray Ward (1945) 73%. Krishnan (1949) also obtained a 73% cure-rate in 100 cases. Miller (1942) obtained 84% in 51 cases, Hayes (1945) 86% in 85 patients.

Racial Differences. It is well known that healing of

wounds in the African Bantu races is accompanied by far greater fibrosis and keloid formation than in Europeans and Asiatics.

For this reason their women rarely suffer from genital prolapse, and, after traumatic labours frequently develop vaginal scarring and stenosis.

17 of the Bantu cases considered here were complicated by vaginal stenosis, as compared with none of the Indians.

Indians, (and Asiatics generally) due to poor musculature and too frequent childbirths, frequently suffer from a greater or lesser degree of prolapse, which greatly facilitates the repair of a fistula when present.

For these reasons it is obvious that fistulae in the Bantu are more difficult to treat than in the Indian.

One's experience of Europeans is limited to one case. Although she had been operated on 13 times previously, her vaginal tissues were still astonishingly supple. A Bantu patient would have presented a much more depressing picture after 13 operations!

SUMMARY

A comparatively simple operation for the repair of vesico-vaginal fistulae is described, which gave an overall cure rate of 94% in 72 cases (uncorrected).

The reasons for the sinister reputation which this lesion has acquired are considered and the view is expressed that any surgeon using the simpler methods described here would be successful in the great majority of cases.

Racial comparisons are made and reasons for the apparently greater difficulty of these cases in Bantu women are given.

My thanks are due to Professor O. S. Heyns who made available the clinical material and gave helpful criticism and to Sisters E. Pollock and H. W. Bester for their devoted nursing care.

WHERE URETERIC ORIFICES ARE INVOLVED

Serial No.	Hospital No.	Size of Fistula	Vaginal Contraction	Sepsis	Previous Operations	Operation Date	Uretric Catheters used	Result	Urethroplasty	Later Plastic Operation Advised for Vagina
31	Bara. 14781	.. 4 cm.	—	—	—	11.11.48	One	Cured	—	—
36	Bara. 15754	.. 3 cm.	+	++	—	2.12.48	Two	Cured	—	—
45	Bara. 5942	.. 1 cm.	—	—	2	23. 2.49	One	Cured	—	—
47	Bara. A. 8808	.. 2 cm.	+	—	—	22. 3.49	Nil	Cured	—	—

WHERE URETHRA IS SERIOUSLY DAMAGED

Serial No.	Hospital No.	Size of Fistula	Vaginal Contraction	Sepsis	Previous Operations	Operation Date	Operation Details	Result	Vaginal Plastic Operation Advised
2	Cor. 1486	.. .5 cm.	—	—	—	13. 2.48	Vertical suture line	Cured	—
9	Cor. 1483	.. 4 cm.	—	+++	—	2. 3.48	Deep sutures 'T' shape, superficial sutures transverse.	Cured	—
12	N.E.H. A.K.	3 cm.	+	—	1	10. 3.48	Vertical suture line	Cured	—
13	N.E.H. P.B.	2 cm.	—	—	—	17. 3.48	Vertical tear of urethra and bladder sutured.	Cured	—
15	Cor. 5387	.. 4 cm.	—	—	—	25. 5.48	Vertical suture line	Cured	—
21	Cor. 6295C	3 cm.	—	+	1	9. 6.48	Fistula next to cervix. Sutured in 'T' shape and covered by cervix.	Cured	—
23	Bara. 4298	.. 5 cm.	—	—	—	3. 8.48	Long tear through urethra bladder and cervix to internal os. Sutured vertically.	Cured	—
24	Bara. 3590	.. 4 cm.	—	—	—	10. 8.48	Sewn vertically	Cured	+
46	Bara. A.5429	2 cm.	—	—	—	3. 3.49	Vertical suture line	Cured	—

WHERE EDGES OF FISTULA COULD NOT BE APPROXIMATED

Serial No.	Hospital No.	Size of Fistula	Vaginal Contraction	Sepsis	Recto-vaginal Fistula	Operation Date	Remarks	Result
10	N.E.H. 3179	5 cm.	+	—	+	25. 2.48 24. 3.48 25.10.48	Patient still has a crack-like fistula. A tube graft has now been prepared with which to cover the fistula. (Transplantation of ureters not feasible because of poor anal tone).	Still under treatment.
11	Cor. 2511	5 cm.	+++	—	—	26. 3.48	Operation unsuccessful	Ureters transplanted.
20	Cor. 57450	4.5 cm.	+	+	+	22. 6.48	Flap of cervix turned up	Cured.
27	Bara. 4937	5 cm.	+	++	—	24. 8.48	Flap of cervix turned up	Cured.
49	Bara. 13242	4 cm.	+	—	+	12. 4.49	Bladder posterior to fistula mobilised	Cured.
52	Cor. 2916C	4 cm.	+	—	+	12. 4.49	Bladder posterior to fistula mobilised but suture line broke down.	Still under treatment.

SIMPLE FISTULAE

Serial No.	Hospital No.	Size of Fistula. (R.V.F.= Recto-vaginal Fist.)	Vaginal Contraction	Sepsis	Previous Operations Elsewhere	Operation Date	Result	Urethroplasty	Plastic Operation Advised for Vagina
1	Cor. 1485	1 cm. diam.	—	—	—	13. 2.48 10. 3.48 16. 4.48	Cured	—	—
3	Cor. 1668	Pinhole	—	—	1	20. 2.48	Cured	—	—
4	Cor. 1484	1 cm.	++	++	—	20. 2.48	Cured	—	+
5	Cor. 1484	1.5 cm.	+	+	2	17. 2.48	Cured	—	+
6	Cor. 1137	2 cm.	—	—	1	? Feb.48	Anaesthetic death at commencement of operation	—	—
7	N.E.H.L.R.	2 cm.	++	++	—	15. 2.48	Cured	—	+
8	N.E.H.M.F.	1.5 cm.	—	+	1	1. 2.48	Cured	—	—
14	Bara. 6204	1 cm.	—	—	—	13. 5.48	Cured	—	—
16	N.E.H. 3549 Bara. 369	3 cm.	+	++	—	28. 2.48	Cured	13. 5.48	—
17	Bara. 378	2.5 cm.	—	—	1	15. 2.49	Cured	27. 5.49	—
18	Bara. 371	2 cm.	++	—	1	17. 6.48	Cured	—	+
19	N.E.H. 831	3 cm.	+	+++	—	10. 3.48	Cured	13. 5.48	—
22	Bara. 3835	1 cm.	+	++	—	7. 4.48	Cured	—	+
25	Bara. 5795	Pinpoint	—	—	—	24. 6.48	Cured	—	+
26	7193C	1 cm.+R.V.F.	—	—	—	17. 8.48	Cured	—	—
28	Bara. 6105	2.5 cm.	—	—	—	29. 6.48	Cured	—	—
29	Cor. 9814C	1.5 cm.	—	—	—	22. 6.48	Cured	—	—
32	Bara. 14340	1.5 cm.	—	—	—	30.10.48	Cured	27.11.48	—
34	Bara. 2174	2 cm.	+	—	3	18.11.48	Cured	—	—
35	Cor. 105690	2 cm.	++	+++	1	17. 8.48	Cured	4.11.48	+
37	Bara. 20362C	3 cm.	—	—	—	26. 4.48	Cured	—	+
38	Bara. A. 837	2 cm.	+	—	—	24.12.48	Cured	—	—
39	Bara. A. 851	1.5 cm.	—	—	—	11. 1.49	Cured	—	—
40	Bara. A. 2707	3 cm.+R.V.F.	+	+	—	18. 1.49	Cured	—	—
41	Cor. 1030C	.5 cm.	—	—	—	25. 1.49	Cured	—	+
43	Bara. A. 5424	2.5 cm.	—	—	—	4. 2.49	Cured	—	—
42	Bara. A. 4555	4 cm.	—	—	—	16. 2.49	Cured	—	—
44	Gen. 13211	2.5 cm.	—	—	13	10. 2.49	Cured	—	—
49	Bara. A. 10149	3 cm.	+	++	1	3. 8.48	Cured	Not yet done	—
50	Bara. A. 13316	Pinpoint	—	—	—	29. 3.49	Cured	—	—
51	Bara. A. 11489	5 cm.+R.V.F.	—	—	—	12. 4.49	Cured	—	—
53	Cor. 2823C	.5 cm.	—	—	—	5. 4.49	Cured	—	—
54	Cor. 1899C	1 cm.	—	+	—	8. 4.49	Cured	6. 5.49	—
55	Bara. A. 13821	Pinpoint	—	—	—	8. 4.49	Cured	—	—
56	Cor. 3770	1 cm.	—	—	—	19. 4.49	Cured	—	—
57	Bara. 11429A	1.5 cm.	++	—	—	16. 5.49	Cured	—	—
58	Bara. A. 21632	2 cm.	—	—	—	20. 5.49	Cured	—	—

THE BRITISH NATIONAL HEALTH SERVICE*

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While in Britain during the middle of last year, I took the opportunity of studying the National Health Service. I visited the Ministry of Health on two occasions and had long talks with Sir Wilson Jameson, the Chief Medical Officer, and two of his senior officials. I also visited the Lancashire and Birmingham regions which, after discussion with Sir Wilson, seemed to resemble conditions in Transvaal more closely than do the Metropolitan Regions based on London. I saw the accounting section of Guy's and St. Thomas's, and spent some time at King Edward's Hospital Fund, the General Medical Council and the University Grant's Committee.

In addition, by courtesy of the High Commissioner, I was enabled to invite all known South African post-graduate students to attend a meeting at South Africa House. For this meeting individual invitations were sent to all post-graduates whose addresses were known, and in addition, I circularised 42 Teaching or Research Institutions. From the Dean or Administrative Officer of each Institution I received the fullest co-operation by way of notice to students. In this connection I should like to mention specially the Dean of Post-Graduate Studies at Manchester who has befriended a Cape Town graduate in a remarkably friendly and efficient manner.

General Impressions of the Progress of the Service as it affects: (a) The Citizen; (b) The Doctor; (c) The Dentist; (d) The Hospital; (e) The Medical School.

(a) *The Citizen.* There is a good deal of criticism of the cost of the Service—meaning the weekly contribution—more especially among such as have not been ill since July 1948. Everyone has, however, procured a second pair of spectacles in case of need and hardly anyone realizes that only about 20% of the weekly contribution goes into the Health Scheme; 80% is for social security. The vast proportion of the cost of the scheme is found from taxation. Those in the salary group rather higher than were accustomed to free treatment previously, and especially nursing mothers, are extremely appreciative.

(b) *The Doctor,* in writing in such papers as the *British Medical Journal* and *The Practitioner*, is critical. Most of the time I was in U.S.A., Lord Horder was carrying the fiery cross of opposition through the country, but every doctor (mostly general practitioners) whom I questioned, welcomed the scheme. I never met a serious critic. One of the Professors of Medicine at a Midland School told me that he had joined the board of the region definitely critical in mind, but he joined because he felt he ought to. He was appointed Chairman of the Development Committee of the Board. Starting in April 1949, he made it his business to see every doctor in the scheme in the region. He had not quite finished his survey when I saw him at the begin-

ning of September; but he had not yet found a single man who wanted to scrap the scheme and get back to the position pre-July 1948. He had collected any amount of constructive criticism, but nothing essentially hostile. His is not the largest region, but it is not the smallest. The Ministry told me that they did have a lot of criticism to meet, but that the expressions of satisfaction far outweighed them. I almost believe that the service members of the Ministry staff are a little overwhelmed by the success which has attended the scheme. They have, of course, put in a tremendous amount of work themselves, but the smoothness with which the scheme has come into being is in no small measure due to the fact that there is still in England a considerable number of men of great distinction who make it their business to attend to local public affairs. Such men have created the Regional Boards—men like the Vice-Chancellor of Manchester University (himself a doctor) who is Chairman of the Lancashire Region (No. 13)—the largest both in population and number of hospitals. I think the Ministry realizes that the success of the scheme depends in large measure on decentralization and keeping faith with the Regions. Unfortunately the accounting of hospitals is so primitive that the Ministry experiences a very real difficulty in obtaining a yardstick by which to measure efficiency; as a result there is some tendency towards bureaucracy in financial matters. Regions are very much alive to this, and special attention is being paid to cost accounting. I shall refer to this later.

On the whole, the doctor supports the scheme. He realizes that within the scheme there is no place for the man who expects to make a very large income; but the real doctor is interested solely in keeping the citizen well and curing him when he is sick. He realizes that the cost of medical care has grown out of all proportion in recent years and that it is only by means of a Health Scheme that the health of the *whole community*—not merely the very rich and the very poor—can be adequately maintained. He wants to see the scheme improved—especially must he be relieved of paper work—but he will work it.

There is a desperate shortage of medical ancillaries. Lord Trent, Chairman of Boots, laid special stress on this in connection with pharmacists in his speech at the Annual Meeting of the Company. The same is true all round—Physiotherapists, Occupational Therapists and so on. In spite of the fact that from some considerations one would say there are too many people in Britain, there are still too few in many directions to run the country efficiently. This is probably due at least in part to a failure among young people to realize that money is not everything, but that service, provided the wage is adequate, does in fact bring a measure of satisfaction far beyond that which can be found in the pleasures obtainable through the possession of money.

*A memorandum prepared for general information and submitted for publication on the recommendation of the Southern Transvaal Branch of the Medical Association of South Africa.

When the Government accepted the Spens Report on Remuneration of Consultants and Specialists (Cmd. 7420, May 1948) it became necessary to decide who was a consultant or specialist, and in which grade of salary each man should be placed. Since no Register of Specialists is kept by the General Medical Council, it was decided to do the thing *ad hoc* and each Region was called upon to prepare a list of the specialists in its area. This was done with remarkably little friction, and though appeal boards were established in a few cases, the Regions' lists have been accepted almost as they stood. Rejected persons may apply to the Region for reconsideration in about a year's time, but thereafter admission to specialist status will be on the basis of appointment to a specialist post filled after advertisement. By this means the basic salary to be paid was fixed locally.

In addition to the basic salary the Spens Report recommends distinction awards to be conferred on the recommendation of a Central Committee in London. This Committee consists of distinguished members of the profession delegated by the Royal Colleges without representation of the Ministry. When I left England, this Committee had only just begun work. Except for one point, however, it was anticipated that it would complete its task without great difficulty. This difficulty was whether the specialist engaged in teaching would necessarily receive a distinction award corresponding to the nature of his teaching duties. The Spens Report appears to mean that distinction means professional distinction, and it is clear that the teacher, though he will naturally have possessed professional distinction at the time of his appointment, may be an exceptionally good teacher without being the most distinguished man locally in his professional work as a medical man. There is some difference of opinion on this point.

The Spens Report also indicated that it expected that a specialist engaged in teaching would receive a salary higher than the basic one for his hospital appointment.

As a result, in February 1949, the Chancellor of the Exchequer authorized increased salary scales for University staffs engaged in clinical teaching; this in turn led to increase in salary scales for medical and dental staffs not engaged in clinical teaching, and finally to increase in salary for all other University posts in all faculties.

The final outcome is thus:

i. *For medical personnel not engaged in teaching*, the salary is the basic Spens Report figure + distinction award, if any;

ii. *For persons engaged in clinical teaching*, a salary fixed and paid by the University within the limits laid down by the Chancellor (e.g. professors, £2,250—£2,750) + distinction award, if any, paid by the hospital board to the University and not to the officer. The University will then pay the distinction award to the officer;

iii. *For persons engaged in non-clinical medical or dental teaching*, salary fixed and paid by the University within the limits laid down for non-clinical teaching by the Chancellor;

iv. *For persons engaged in teaching in other faculties*, salary fixed and paid by the University within the Chancellor's limits.

These new salary scales will make it well-nigh impossible for South African Universities to recruit any staff overseas on existing South African scales; though it must, of course, be noted that there is no cost-of-living allowance in Britain and taxation is higher. (I have a note of all the new scales.)

(c) *The Dentist*. Financially the dentist has done extremely well by the scheme, so much so that fees have been reduced. However, this has its drawbacks both for the dentist who is seriously overworked, and also, for at any rate some sections of the community. Unlike the doctor, the dentist is not a full-time officer of the scheme, but is paid fees. Before the scheme came into force, there were a lot of dentists in salaried appointments with School Boards, Municipalities and so on, and they were quite reasonably well paid; but the fees payable under the scheme and the large increase in the amount of work—now that the patient does not have to pay himself—have meant that very many salaried men have resigned and gone into private practice, where they draw fees from the scheme. As a result, two of the most important groups of patients—school children and nursing mothers—are receiving little or no attention. The Ministry is very much alive to the difficulty and hopes to re-establish equilibrium. The main factor must be the training of more dentists to enlarge the profession which is much too small, as it is also in this country. It is a cause of some alarm to myself to find that the tremendous efforts made by the University of the Witwatersrand Dental and Oral Hospital to produce a larger flow of recruits to the profession in South Africa are in danger of being jeopardized by the attractiveness of practice in Britain. It is true that this country owes a great debt to the Dental Schools of Britain and the U.S.A., but I hardly think we can afford as yet to repay it in kind, except in an emergency. The position will be watched in order to ascertain whether the attraction of Britain does, in fact, produce a serious drain on our supply of young graduates. It is, however, difficult to see what steps the University can take to check such a drain.

(d) *The Hospital*. It is essential to realize that before the Health Scheme came into operation, there were two main systems of hospitalization in Britain: (1) The so-called Voluntary Hospitals which drew their funds from endowments, subscriptions and such bodies as King Edward VII Hospital Fund; and (2) the Municipal Hospitals, many of which derived from institutions originally established by Poor Law Guardians, though some were, I believe, established by County Councils and Municipalities to fill a need not sufficiently covered by the voluntary system.

These two systems, though the hospitals were sometimes on opposite sides of the same street, had absolutely no contact with one another. The Voluntary Hospital had all the prestige, but in recent times was seriously short of money; the Municipal Hospital was well supported out of the rates. Now both systems are in the one scheme and as a result there is a great improvement in efficiency and economy.

One most important point will be attended to again under *Medical Schools*, but it must be mentioned here too. One reason for the prestige of the old Voluntary

Hospital was that it catered almost entirely for critically ill patients—it contained comparatively few chronic cases. These were to be found almost entirely in the old Infirmarys deriving from Poor Law Institutions. As a result, since Medical Schools were attached to Voluntary Hospitals, the medical student hardly saw a chronic case before he qualified. What was much worse from the point of view of the chronic case, was that he hardly ever saw a doctor, and so had little or no treatment.

The tendency now is to treat all patients in the same way on admission. Every patient has the same supervision by the specialist and it is hoped that the number of chronic cases will in future be very greatly reduced as a result of proper medical care. Certainly in Birmingham the Infirmary will no longer be the place where the sick poor go to die. Certain incurable cases which require special nursing will have to be retained in hospital, but it is hoped that the great majority of this type of case will not stay in hospital more than three months. Even if bedridden, the case will be sent home, provided a room is available. This room will be equipped with a hospital bed, meals will be sent out from the hospital, and a trained nurse, either from the hospital or district service, will visit the patient as ordered by the doctor.

It is confidently believed that this procedure will:

- i. Give greater happiness to the bedridden;
- ii. Greatly reduce the number of chronic sick and restore many to health and working power;
- iii. Provide adequate teaching and material for research on the problems of invalidity;
- iv. Provide a greater turnover of beds inside the hospitals.

The idea is extremely interesting and should be ripe for study in a year or two by someone better qualified than myself to assess its value.

The medical staffing of hospitals has been dealt with under the heading of the doctor.

Nurses are still very short and as a result something like 47,000 beds (total population 43,000,000) are closed. But the Nursing Force has risen by 6,000 since the scheme was inaugurated, and those best qualified to judge, while not satisfied, consider that the position shows definite signs of improvement. It must, however, be borne in mind that not more than 31,000 girls qualify for the School Leaving Certificate each year, and these must be spread over all the professions open to women. In view of this, an increase of 6,000 in the Nursing Force in a year seems extremely good—probably some have not qualified for School Certificate.

There has been a serious shortage of staff nurses willing to apply for Ward Sisters posts. The better girls have become Sister Tutors and it is believed that this has been due to the girl believing herself not qualified to accept the great responsibilities of a Ward Sister. In order to meet this, the King Edward Hospital Fund has established a Staff College for training Ward Sisters. It is anticipated that this College will produce very good results.

Many hospitals, particularly the Old Voluntary Hospitals, are extremely old and require to be rebuilt. This is illustrated by the fact that Guy's Hospital, which was seriously bombed, for less than 800 beds requires 200

cleaners (in addition to ward maids) and a maintenance staff of 183, some of whom are, however, employed in maintaining the houses belonging to the estate. St. Thomas's, which was also badly damaged by bombing, in spite of its fairly modern plan, is to be rebuilt and turned about since the surroundings of some wards have become extremely noisy. The administrative side is receiving a great deal of attention, and there is a tendency to divide the operation of the hospital into two parts:

- i. The medical side administered by an often part-time Medical Superintendent;
- ii. The General Administration under a well-qualified Secretary or Financial Officer.

Each is directly responsible to the Board of the Hospital. I only discovered this tendency shortly before I left England, and so had insufficient time to give to it. I feel, however, that it is worthy of study since the Medical Superintendents of our larger hospitals in Transvaal are hopelessly overworked and some division of responsibility might be desirable.

The accounts of most hospitals are on much the same basis as our own, but the late Chief Accountant of St. Thomas's (now with the King Edward Fund) felt that the form is unduly primitive. As a result a body named The Institute of Hospital Administrators (13 Maze Pond, London, S.E.1) has made it its principal task to investigate the matter. A joint committee was formed with the Accountancy Profession and a valuable report produced (I have two copies). The underlying idea is to get away from costing per bed or per patient since this is held to involve arbitrary allotments amounting to nearly half the expenditure of the hospital, and to count up costs against wards for which, in the very nature of the case, the Sister cannot be held responsible.

As a result, the report recommends dividing expenditure under three heads:

Direct or Basic Services found in every hospital and directly attributable to In- or Out-patients;

Indirect Services which are essential, but do not bear a direct relationship to patient numbers, but for which a member of the administrative staff can be made responsible;

Ancillary and Auxiliary Services, some of which do bear a relation to patient numbers, but which are not found in all hospitals.

The report must be consulted for a full understanding of the scheme, but it certainly seems to me to produce a form of accounts under which different hospitals can be fairly and accurately compared.

I mentioned earlier that the Ministry had difficulty in finding a yardstick to compare the expenditures of different hospitals. The latest forms of estimates published by the Ministry (Statutory Instrument No. 1414 of 1948—of which I have copies) are readily adaptable to the form of account recommended by the Committee, and St. Thomas's and Guy's are making use of this form. It is hoped that other representative types of hospital will follow suit.

(e) *The Medical School*. I had thought before I visited it that the Health Scheme Region was built round a Teaching Hospital. In a way this is true but

in England the Teaching Hospital is outside the Region with its own separate Board of Governors.

In Scotland the Teaching Hospital is within the Region and is the vital centre thereof. In England the Teaching Hospital is of course the best equipped and staffed hospital in the area, and takes in patients from the Region for treatment not available in the Region's Hospitals, but there is a lack of cohesion. The separation was originally granted as a sop to the prestige of what was the best Voluntary Hospital of pre-Scheme days whose staff feared that they would be swamped when all the 'Infirmaries' came in. As a result they were allowed to remain separate. The Vice-Chancellor of Manchester University, himself the Chairman of the Region and a representative of the University on the Board of the Teaching Hospital, considers that a mistake was made. So also does one of the Professors of Medicine at a Midland School. The Dean of the Faculty at this school very strongly supports separation. Having allowed separation, the Minister will have a good deal of trouble in bringing the Teaching Hospital into the Regions. It is, however, extremely difficult to see any real value in separation. The Medical School at Birmingham is very interested in the opportunities now available, which previously were non-existent, for teaching and research on the chronic sick. The Professor of Medicine maintains that the student should have quite a lot of teaching on the chronic sick. He also maintains that in the past the chronic sick received very scant medical attention. He maintains that 20% of teaching beds should be allotted to chronic sick, but he also believes that with the skilled attention they will now receive a large proportion of the old-time chronic cases will be out of hospital in three months. The scheme adopted for home nursing of the bedridden has been discussed earlier, but quite apart from this, it is maintained that quite a proportion of the old-time type of case can be largely restored to activity if tackled early enough.

Research in all subjects is extremely active, and the organization of the work of the young post-graduate would-be specialist is very well in hand. The best I saw was at Manchester where a very senior medical consultant, more or less retired from practice, is Dean of Post-Graduate Studies.

As mentioned earlier, I invited all known South African post-graduates to a meeting at South Africa House. It was attended by 32 doctors. After speaking myself on general aspects of hospital work in the Union, we had a fruitful discussion for an hour-and-a-half. The main outcome was that although attractive jobs are available in Britain, the great majority of those studying overseas do want to come back to South Africa. They do, however, experience one great difficulty in the extremely irregular arrival in London of the *S.A. Medical Journal*. From what I could check myself, it would appear that there is some irregularity in despatch, since libraries may go a couple of months without a copy and then receive three or four in the same mail.* I am

* Journals are posted weekly without fail to all subscribers, whether overseas or in South Africa. Their delay in arrival in England is therefore presumably in transit. Representations are, nevertheless, being made to the postal authorities about this matter.—Editor.

taking this matter up with the Medical Association of South Africa, but meantime I would urge very strongly that copies of all advertisements of posts vacant in Provincial Hospitals should be sent direct to South Africa House, and that the High Commissioner be asked to provide a notice board and ensure posting of vacancies immediately on receipt. Typed copies of the advertisement should be sent by air mail at the same time as the material is sent to *S.A. Medical Journal*, and six weeks or two months should be allowed between date of despatch and last day for submitting application. The *S.A. Medical Journal* always goes to England by sea and, with apparent delay in despatch, it is clear that it may well arrive after the last day for sending in names. Candidates should be advised to apply by airmail (or cable), if necessary transmitting any heavy stuff such as copies of published work by sea. Of the 32 who attended the meeting, 16 are members of the Medical Association of South Africa in good standing.

I only traced one South African undergraduate who is an older man, very well qualified in science, who feels the lack of a medical qualification in his work.

General Medical Council. The Registrar was very distressed at the virtual breaking of reciprocity by our introduction in the Union of the intern year. He admitted that the change was long overdue in England, but that it had not gone through on account of the war and pressure of legislation since. He assured me that provision was made for it in a new Medical Bill sent to the Ministry in 1947. The Ministry assured me that the Bill would go before Parliament in the 1950 session, but, of course, internship would not be fully effective till, say, 1957, since Parliament would only enforce the change on persons registering as medical students after the passage of the Act.

Meantime I promised to ascertain whether the necessity for first doing an internship was essential for everyone seeking registration with S.A. Medical Council after 1 December 1948, or only for persons qualifying after that date. The regulation did not seem to be quite clear.

The Registrar felt that while a majority of the General Medical Council might be in favour of a Specialist Register in Britain, the profession as a whole was not in favour, and there are too many vested interests to overcome to make the establishment of such a register a live issue for some years to come. He also assured me that while General Medical Council desires to lay more stress on paediatrics in the final examination, there is no intention at present of raising it to be a fourth subject on its own.

Visits to Health Scheme Regions. Finally, I am authorized by the Chief Assistant to Sir Wilson Jameson (Dr. Charles) to say that the Ministry would welcome visits by Provincial Officers (both lay and professional) to the various Regions, and that if he is allowed a short time to make arrangements, he will ensure that visitors are shown anything they may wish to see. A visit should be for not less than one month and two could be spent very profitably on the work of different Regions.

ASSOCIATION NEWS : VERENIGINGSNUUS

ANNUAL REPORT OF THE HONORARY SECRETARY OF THE NORTHERN TRANSVAAL BRANCH FOR THE YEAR ENDING FEBRUARY 1950

This past year has been a busy one for your Branch Council and its various subcommittees, and in many ways it has also been a momentous year. I would like to touch briefly on some of the highlights.

Membership: Our Branch membership now stands at 360, an increase of 18 on the previous year. It seems that the clash between ourselves and the Provincial authorities regarding hospitalization in the Transvaal and which came to an acute head in August 1948, has done much to consolidate the ranks of the Association. Let us hope that stimuli of this sort will eventually bring about 100% membership of the Association.

Branch Meetings: Ten ordinary monthly meetings were held during the year with an average attendance of 38. One special meeting to consider the Draft Organization Rules was held in April and one joint meeting with the Medical Faculty of the Pretoria University took place in November to listen to Dr. Best of Canada. Your Programme Committee is to be congratulated on the variety of fare they arranged for your benefit during the year. We were fortunate in hearing two excellent addresses by overseas colleagues, viz., *Skull Injuries* by Dr. Mock, of Chicago, and the address by Dr. Best, of Toronto. The attendance at each of these meetings was approximately 60 members, which reflects their popular appeal, and which I hope flattered the visitors. The policy of the Branch Council this year was to reduce the business items at monthly meetings to an absolute minimum and to collect essential business matters for one or two meetings of the year. Furthermore, it was felt that clinical demonstrations were not as popular as symposia by several speakers on a given subject. We thus held three symposia during the year: (a) *Peripheral Vascular Disturbances* by Drs. Bremer and Ziady; (b) *Medico-Legal Problems* by Prof. Laubser and Mr. Masters; (c) *Symposium on Prematurity* by Drs. Davel, Jansen, Epstein and Bischoff. We were fortunate to have an address by Dr. Alexander, of Onderstepoort, on recent protein analyses, and a large group attended at Westfort Leper Institution where Dr. Davidson arranged an excellent talk and demonstration.

The opening meeting of the year last March was addressed by Prof. S. F. Oosthuizen, who gave us a most excellent account of medical teaching and research in several overseas countries. Then there were two films shown, and the last meeting in January was a clinical one arranged by Prof. Besselaar, Dr. Davel and Dr. Ziady.

Another innovation regarding meetings was to circulate a résumé of the address or symposium with the next agenda. This served two purposes—it saved the reading by the Secretary of lengthy minutes, and gave those members who could not attend the meeting the benefit of its substance.

Branch Council: This Council met 13 times and the attendance was good (average 14 out of 19). The following Sub-Committees were chosen at the first meeting.

- (a) Programme Committee (met 10 times).
- (b) Contract Practice and Standard Fees (met nine times).
- (c) Ethical Committee (met three times).
- (d) Iscor Joint Sub-Committee (met once).
- (e) Standing Committee on Health Services (met twice).
- (f) Executive Committee (met 10 times).

The Standing Committee on Health Services was a new Committee which was requested by Federal Council. Branch Council decided that this Committee should be constituted by members of the Executive, members of the Branch on Federal Council and five co-opted members. Although the Committee only met twice the meetings were long and representations on your behalf regarding health services in this Province were made direct to Federal Council and the Provincial Authorities.

During the year, on the request of Federal Council, liaison was made with the Pharmaceutical Society and a Joint Liaison Committee was established to meet at quarterly intervals to discuss matters mutually affecting the profession and the Pharmaceutical Society. Two meetings took place during the year.

Federal Council: The members of the Northern Transvaal Branch on Federal Council are Drs. Struthers, van Dyk, Albertyn and Sypkens. Your retiring President, Dr. Struthers, served during the year on the Executive of Federal Council.

Special Branch Matters: (a) *New Organization Rules for the Northern Transvaal Branch.* The previous Organization Rules of this Branch were drawn up in 1933 and had in many instances become out of date. For this reason they were completely revised and were formally passed by Branch Resolution in April 1949. They were accepted by Federal Council later in the year and are now in the process of being printed. The new booklet will be made available to members shortly.

(b) *Transvaal Hospitals' Ordinance.* This past year has been one of feverish work between the Branches of the Transvaal, the Provincial Authorities and an Augmented Executive Committee established by Federal Council. The Provincial Authorities have been slow in promulgating the Interim Suspension Ordinance which came as a result of mediation in August 1948. At this present stage, however, matters are being finalized and appointments are to be made in all the hospitals of the Transvaal. We understand that the Interim Suspension Ordinance will come into effect from April for a period of three years.

The Association stood out for several principles, the two most important being a 'means test' to govern admissions to the free hospitals and the chance for as many doctors as possible to obtain a hospital connection which in fact meant as many part-time posts as possible. However cynical we may feel about the outcome of our struggle with the Province, these two main principles have been acceded to, in addition to which a Committee with plenary powers has been established representing the Provincial Executive, the Hospitals Advisory Council and the Medical Association, to which points of difference can be referred directly.

(c) *The New Branch Office and Secretary.* Although we must accord our grateful thanks to Mr. Hofmeyr for his services in the past, the old Branch office at 310, East Church Street was by no means ideal and during this year we were fortunate in obtaining our new office in the Administration Building of the Pretoria General Hospital. For this we have to thank the generosity of the Hospital Board and in particular the Superintendent of the Pretoria General Hospital. We have also been fortunate in obtaining the services of Mrs. Hofmeyr as our part-time secretary during every morning of the week. This change has been a great help in the administration of the affairs of the Branch.

(d) *Historical Library.* The beginnings have been laid for the establishment of a library on the history of medicine in South Africa. The suggestion came from Dr. L. Klein and members are requested to forward to the Branch Office any documents or photographs having a bearing on the History of Medicine in South Africa and, in particular, historical items of interest to this Branch.

(e) *Hospitals Advisory Council.* Dr. van Dyk represented this Branch on the Hospitals Advisory Council for three years which terminated in November 1949. Your Branch Council thought fit to nominate Dr. J. H. Struthers for the ensuing three years.

(f) *Hospital Board.* Under the Public Hospitals Ordinance, Hospital Boards are now constituted somewhat differently from before and this Branch was asked to nominate two members from which the Province would elect one. We have forwarded the names of Dr. van Dyk and Dr. Davel.

(g) *Standard Fees for Private Practice.* The Branch Council and especially the Contract Practice Sub-Committee have been busy collecting information regarding this important matter during the whole of the year. The question has now reached finality and your Branch decided at a special business meeting in November to lay down that private fees should be 33½–50% above the fees laid down for Medical Aid Societies. It will also be implicit that these fees are customary or average fees and may be exceeded if the circumstances warrant it. It is intended to issue a booklet regarding these standard fees for private practice.

(h) *Divisions of the Branch.* The only reports from the Divisions show that they are all functioning satisfactorily and apparently are solvent but we have found that correspondence with both the Pietersburg and Western Transvaal Divisions is

very tardy on their side and the office experienced considerable difficulty in obtaining from them the names of their office bearers and details regarding the meetings they held during the year. The most active division, with a membership of 48, is the Eastern Transvaal Division and from their report they appear to have had six meetings during the year as compared to three meetings in the Western Transvaal Division and no meetings in the Pietersburg Division.

The reports from these Divisions are tabled for your information.

In concluding this Annual Report it is my pleasure to place on record the generous and kindly assistance which your office bearers and Branch Council have given me during this term of office.

Pretoria.

P. J. M. Retief,
Honorary Secretary.

IN MEMORIAM

DR. H. P. SCHRÖDER

The profession lost an able member by the death on 17 January 1950 of Dr. H. P. Schröder.

He was born at Paderborn in 1900. After graduating in medicine at Bonn in 1925, he pursued post-graduate studies under Professor Gänssbauer at Nürnberg, and Professor Henselmann in Hamburg, and practised gynaecology for a short while at Düsseldorf. He came to South-West Africa in 1930, and settled at Windhoek. After his release from internment he practised at Windhoek and Otjiwarongo, and for a while as a specialist in gynaecology at Pietermaritzburg.

Dr. Schröder was one of the earliest pioneers as a flying doctor not only of South-West Africa but of any country. He was an intrepid flier.

He leaves a widow and five children to whom our deep sympathy is extended.

His eldest son is studying medicine at the Pretoria Medical School.

BOOK REVIEW

THYROID HORMONES

The Thyroid Hormones and their Action. By G. Mansfield, M.D. (Pp. 157 + xii. With 60 diagrams and 45 tables. 24s.) London: Messrs. Frederick Muller Ltd. 1949.

Contents: 1. The 'Myelotropic' Hormone. 2. Thyroxine. 3. The Thyrothyroids

This volume is a monograph on certain aspects of the physiology of the thyroid gland and is based on the researches of the author conducted over a period of years. One has always believed that the proper place for publishing the results of experimental physiology is in one of the many scientific journals devoted to this purpose. A monograph is usually not the most suitable medium for presenting this type of work as it has a limited circulation and there are other manifest disadvantages too.

Under the name of myelotropic hormone a substance, which is not thyroxine, is described which controls the anti-anaemic activity of the liver. The thyroid is also supposed to alter the efficacy of thyroxine by the secretion of other substances. These other factors, named thyrothyroids, are concerned with metabolism and are subject to seasonal variations. Finally the author makes out a case for the denial that thyroxine overproduction is responsible for Grave's disease; and that in this disease there is a qualitative alteration in the activity of the thyroid gland with a deficiency in the manufacture of colloids as the primary disturbance.

It is difficult to assess the value of this book but it may be of interest to those engaged in the study of the thyroid and its pathology.

CORRESPONDENCE

DECISIONS OF MEDICAL COUNCIL COMMITTEES OF INQUIRY

To the Editor: The recent action and verdict of the S.A. Medical and Dental Council in a case of mutilation of a dead body by a medical practitioner and where a *prima facie* case for an enquiry existed, must occasion a grave sense of disquiet in the profession and the public alike.

This self-admitted and highly unprofessional piece of conduct was settled (*sic*) by the Council with a reprimand and a caution. All, however, remember the recent occasion when an innocent practitioner who had the right upheld legally to charge full fees for six separate anaesthetics, was struck off the register for three months and had to fight and suffer two costly legal actions subsequently to clear his innocent and good name. Why? Well may we ask! Because the Council thought and felt that this doctor should have charged a much debatable five guineas less?

Truly must we ponder the question: By what light does the Council, the self-confessed guarantor of the public weal and the guardian of medical ethics and conduct, guide itself in its decisions?

22 February 1950.

Quo Vadis?

ADMISSION OF PATIENTS TO CAPE TOWN HOSPITALS

To the Editor: In order to get a patient into a general hospital in Cape Town, it is at present necessary to telephone each hospital in turn in search of a bed. There is the wait for the exchange to answer; the wait for the admission officer to be called; the wait for the admission officer to consult the records or the wards; and very often the disappointing reply: 'No beds'.

Surely this tiring and exasperating experience is unnecessary. Now that all general hospitals in Cape Town are controlled by one authority, it should be possible to establish a central admitting bureau to deal with all enquiries for beds. I believe that such a system is in operation in London and is functioning very satisfactorily.

'Three Pines',
Maclear Road,
Claremont.
24 February 1950.

J. Henson, M.B., Ch.B.

MENTAL HOSPITALS AND INTERNSHIPS

To the Editor: As an intern in a mental institution, I wish to join issue with my colleagues the 'Fortunate Interns' in their criticism of mental institutions as suitable hospitals for compulsory internship.

I am convinced that one gets a larger and more varied experience in an institution of this type than in a large proportion of general hospitals, and that the types of cases seen approximate more closely to those in general practice than those met with in many a general hospital.

In this institution I look after the physically sick among a patient population of 1,750, as well as a staff population of nearly 500.

I follow up all the major surgical cases occurring among these, which are referred to a consultant, assist at their operations and frequently treat them on their return here. I do all the minor surgery myself.

I have good facilities for pathological and microscopic work and the advice and supervision of well-qualified and experienced colleagues.

My position compares very favourably with some of my fellow graduates in general hospitals, who are fortunate if they are allowed to do a chronic appendix under supervision during their internship year.

I strongly advise my fellow graduates to get themselves posted in mental institutions. They will never regret it.

Witrand Institution,
Potchefstroom.
25 February 1950.

B. J. B. Faul.